EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF HAWAII

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED JUNE 30, 1999

Prepared by the Staff of the: Employees' Retirement System of the State of Hawaii 201 Merchant Street, Suite 1400 Honolulu, Hawaii 96813 (808) 586-1735 / (808) 586-1650

DAVID SHIMABUKURO, Administrator



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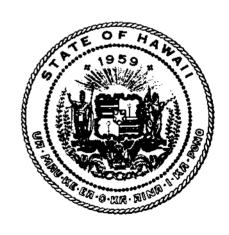
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EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF HAWAII



INTRODUCTORY SECTION



December 28, 1999

Honorable Benjamin J. Cayetano Governor, State of Hawaii Honolulu, Hawaii 96813

Dear Governor Cayetano:

It is my pleasure to submit this Annual Financial Report which details the growth and strength of the Employees' Retirement System (ERS).

I am pleased to report that the ERS continued to achieve a solid rate of return on its investments, earning over 10.3% during the past fiscal year and 14.7% annually over the past five years. These strong investment returns and the 1997 pension reform measures helped reduce the ERS' unfunded actuarial accrued liability on June 30, 1999, to approximately \$475 million.

A long-term asset/liability study was recently completed. The Board subsequently adopted an asset allocation strategy which should yield an average annual return of 8.5% over the next five years to ensure compliance with the 8% statutory investment target.

As fiduciaries of the ERS, the Trustees are concerned about the recent provision in Act 100/1999 which uses ERS' investment earnings above 10% to help balance the State and Counties' budgets. This diversion of investment earnings means that it will take longer for the ERS to reduce our unfunded liability and to become self-sufficient. It will also increase future State and County government contribution requirements to the ERS. Therefore, the Board strongly supports another provision in Act 100 which states that no future law "shall be enacted to again require the employees' retirement system to apply actuarial investment earnings to offset" contributions needed to adequately fund the ERS.

In closing, I would like to express my gratitude to the members of the Board of Trustees, the staff, our advisors, and the many people who have worked so diligently to assure the continued successful operation and financial health of the ERS.

Respectively submitted,

Amy A Tuliata

Koren Kubota, Chair Board of Trustees



BENJAMIN J. CAYETANO GOVERNOR



STATE OF HAWAII

EMPLOYEES' RETIREMENT SYSTEM

December 28, 1999

Board of Trustees
Employees' Retirement System of the
State of Hawaii
Honolulu, Hawaii 96813

Dear Board Members:

It is our privilege to submit to you the seventy-fourth Comprehensive Annual Financial Report (CAFR) of the Employees' Retirement System of the State of Hawaii (ERS) for the fiscal year ended June 30, 1999. Responsibility for both the accuracy of the data, as well as the completeness and fairness of the presentation, rests with the management of the ERS. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner to present fairly the financial position and results of the ERS' operations.

The ERS was established by the Legislature in 1925 to provide retirement, disability and survivor benefits for State employees, teachers, professors, county employees, police officers, firefighters, judiciary employees, judges and elected officials. On March 31, 1999, the ERS' membership was comprised of 58,387 active members, 2,777 inactive vested members, and 27,950 retirees and beneficiaries. Participating employers include the State of Hawaii, City and County of Honolulu and the counties of Hawaii, Maui and Kauai.

This report is divided into five sections: (1) an Introductory Section, which includes this transmittal letter, the organizational structure, the Certificate of Achievement for Excellence in Financial Reporting, and a summary of the benefit provisions and retirement options; (2) a Financial Section, which contains the report of the Independent Certified Public Accountants, the financial statements of the ERS, and required supplementary information; (3) an Investment Section which contains a report of investment activity, investment policies, investment results, and various investment schedules; (4) an Actuarial Section, which contains an Actuary's Certification Letter, the results of the annual actuarial valuation; and (5) a Statistical Section, which includes significant data pertaining to the ERS.



		1999	 1998	 Increase/ (Decrease) Amount	Increase/ (Decrease) Percentage
Benefit payments	\$	444,047,239	\$ 426,926,149	\$ 17,121,090	4.0%
Refunds of member contributions		39,151,493	24,763,224	14,388,269	58.1%
Refunds paid to State and counties		29,272	-	29,272	100.0%
Administrative expenses		3,775,942	 3,331,700	 444,242	13.3%
Total	<u>s</u>	487,003,946	\$ 455,021,073	\$ 31,982,873	7.0%

The increase in benefit payments is primarily from the annual post retirement and pensioner bonus benefit increases. The increase in refunds of member contributions is due to the benefit option selected by contributory members. Refunds paid to the State and county employers were from the elimination of the Minimum Pension Fund. Administrative expenses increased due to the additional staffing and overtime that was required for the court ordered recalculation of pension benefits of approximately 4,800 pensioners and beneficiaries, and the development of a new computer and office automation system. Administrative expenses are detailed in the Financial Section on page 51 of the CAFR.

Total revenues exceeded expenses by almost \$628 million during the year, thereby increasing the ERS' net assets to approximately \$9.7 billion on June 30, 1999. These assets are held in trust to pay for the benefits of current and future retirees and beneficiaries.

INVESTMENTS

The investment of ERS' assets is governed primarily by an investment authority known as the "prudent person rule." The prudent person rule establishes a standard for all fiduciaries, which includes anyone that has authority with respect to the ERS. The prudent person rule states that fiduciaries shall discharge their duties solely in the interest of the fund participants and beneficiaries and with the degree of diligence, care and skill which prudent men and women would ordinarily exercise under similar circumstances.

By permitting diversification of investments within a fund, the prudent person standard may enable a fund to reduce overall risk and increase returns. The diversification of investments through an asset allocation strategy is generally regarded as the most important decision made in the investment process. Studies have indicated that approximately 85% of the variability in investment returns can be attributed to the asset allocation decision. A summary of the ERS' long-term asset allocation strategy can be found in the Investment Section of this report.

The prudent person rule also permits the fund to establish an investment policy based upon certain investment criteria and allows for the delegation of investment authority to professional investment advisors. The investment policy outlines the responsibility for the investment of the fund assets and the degree of risk that is deemed appropriate for the fund. Professional investment managers have been retained to execute the ERS' investment policy and have full discretion within statutory authority, Board



ADDITIONS TO PLAN NET ASSETS

In order for a retirement system to properly fund the payment of retirement benefits in future years, it is necessary to accumulate funds on a regular and systematic basis. The three principal sources from which the ERS derives its revenues are summarized below:

	 1999		1998		Increase/ (Decrease) Amount	Increase/ (Decrease) Percentage
Member contributions	\$ 55,702,647	\$	56,168,443	\$	(465,796)	(0.8)%
Employer contributions	154,469,844		310,627,135	(156,157,291)	(50.3)%
Net investment income	 904,809,348		1,251,839,166	(3	347,029,818)	(27.7)%
Total	\$ 1,114,981,839	<u> </u>	1,618,634,744	\$(503,652,905)	(31.1)%

The decrease in contributions by members in the Contributory Plan was attributable to fewer contributory members. The number of contributory members will continue to decrease since most new members of the System are required to join the noncontributory plan.

The State and county government employers' contributions for the fiscal years ended June 30, 1999 and 1998 were based on the June 30, 1996 and 1995 actuarial valuation reports, respectively. The decrease in employer contributions was primarily due to the higher investment returns in FY 1996 versus FY 1995, the pension reform measures in Act 327/1997, and a change in the salary growth assumption from a fixed rate of 4% used in the 1995 actuarial valuation to a variable rate based on actual salary increases.

Net investment earnings decreased in FY 1999 due to interest rate increases by the Federal Reserve Board and the world capital market turmoil in 1998.

DEDUCTIONS TO PLAN NET ASSETS

The principal purpose for which the ERS was created was to provide retirement, disability and survivor benefits to qualified members and their beneficiaries. The cost of such programs includes recurring benefit payments, refunds of contributions plus interest to former members, and the cost of administering the ERS. Expenses for the past two fiscal years are shown below:



policy and their respective guidelines. The investment managers hired by the Board as of June 30, 1999 are listed on page 61.

Despite the market turmoil in 1998 and the increases in interest rates by the Federal Reserve Board, the ERS was able to post a 10.3% return for fiscal year 1999, due to the continuing strength in the domestic stock (16.6%) markets. ERS benefited from the recovery of Asian stock markets earning almost 13.8% on international equities. The fixed income sectors trailed ERS' other investment classes returning 3.2% in domestic market and 1.1% in the international bonds due to rate increases in 1999. Real estate holdings gained 2.8% for the year. The ERS' annualized rate of return over the last three and five years were 15.0% and 14.7%, respectively, which matched other public funds' return.

While the ERS has benefited from the favorable investment climate over the past several years because of a strong domestic economy, it is important to remember that the ERS cannot be expected to generate double-digit returns year after year. It is improbable that the current bull market for stocks can continue indefinitely.

FUNDING STATUS

The overall objective of ERS is to accumulate sufficient assets to meet current and future retirement, disability and death benefit obligations to retirees and beneficiaries. The greater the level of funding, the larger the ratio of assets accumulated to the actuarial accrued liability and the greater the level of investment potential. Continuous improvement in the funding of the ERS is sought by developing asset allocation strategies to prudently maximize investment earnings and effective cost containment. The funded ratio was 94.8% and 94.4% as of June 30, 1999 and June 30, 1998, respectively. The improvement in the funded ratio is the result of good market performance and recent pension funding reforms. A detailed discussion of funding method is provided in the Actuarial Section of this report.

PROFESSIONAL SERVICES

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the ERS. An opinion from the certified public accounting firm, Grant Thornton LLP, and the actuary, The Segal Company, are included in this report. Callan Associates Inc. serves as the investment advisor. Other consultants appointed by the Board are listed on page 11 of this report.

Initiatives

The staff has completed assessing, remediating, testing and validating all in-house mission critical computer systems which may be affected by the Year 2000 issue. We are also monitoring the progress of our external investment advisors and service providers that ERS relies on, in addressing their Year 2000 readiness. Although we believe our assessment of our Year 2000 readiness is valid and that we have taken appropriate measures to minimize potential disruptions to the System's operations we cannot assure that there will be no interruptions due to the unprecedented nature of the Year 2000 issue.



ERS completed the recalculation of retroactive benefits for approximately 4,800 retired teaches, principals and vice principals ahead of schedule as a result of a class action lawsuit that ERS lost in March 1998. The initial payments were made to 4,100 members by June 30, 1999 and final payment should be made by December 1999.

The current computer system is near the end of its technical life. We have therefore undertaken a multiyear project to develop a new computer and office automation system to improve customer service.

AWARDS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting (CAFR) to the Employees' Retirement System of the State of Hawaii for its CAFR for the fiscal year ended June 30, 1998. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports.

To be awarded the Certificate of Achievement, a government unit must publish an easily readable and efficiently organized CAFR, whose contents meet or exceed program standards. This report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for only one year. The ERS has received a Certificate of Achievement for the last nine consecutive fiscal years. We believe this report continues to conform to the Certificate of Achievement Program requirements and we are submitting it to the GFOA for consideration again this year.

ACKNOWLEDGEMENTS

The dedicated efforts of the ERS' staff and consultants to assemble the information in this report are sincerely appreciated.

This report is intended to provide complete and reliable information as a basis for making management decisions, determining compliance with legal provisions, and as a means of determining responsible stewardship of the assets contributed by the ERS' members and their employers. The report will be provided to state legislators, State and County officials, and other interested parties.

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David Shimboturo

David Shimabukuro Administrator

BOARD OF TRUSTEES

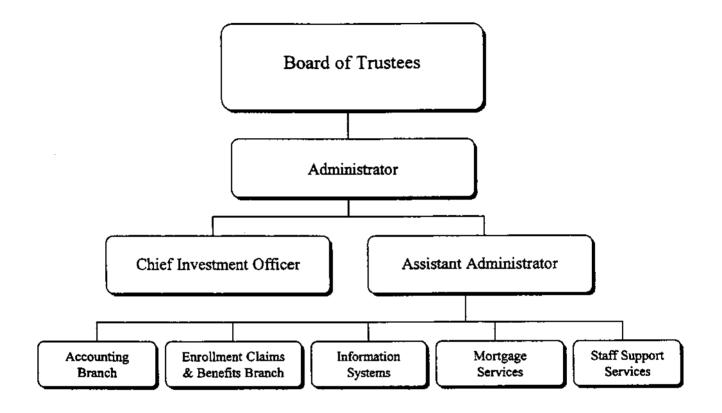
Name	Date Current Term Began	Date Term Ends
Elected:		
Mr. Darwin J. Hamamoto, Vice Chair	January 2, 1994	January 1, 2000
Dr. Hubert V. Everly	January 2, 1996	January 1, 2002
Ms. Jackie Ferguson-Miyamoto	January 2, 1996	January 1, 2002
Ms. Pilialoha E. Lee Loy	January 2, 1998	January 1, 2004
N.		
Appointed:		
Ms. Koren K. Kubota, Chair	April 27, 1995	January 1, 2001
Mr. Tobias (Toby) M. L. Martyn	April 25, 1997	January 1, 2003
Mr. Richard (Rick) L. Humphreys	May 10, 1999	January 1, 2005
Ex-Officio:		
Mr. Neal Miyahira	May 24, 1999	

The Board of Trustees is the governing body of the Employees' Retirement System of the State of Hawaii, with certain areas of administrative control vested in the State Department of Budget and Finance.

Four of the eight members on the Board are elected by the membership: two general employees, a teacher and a retiree. Three members are citizens of the State, one of whom is an officer of a bank authorized to do business in the State or a person of similar experience, who are not employees and are appointed by the Governor. The State Director of Finance is an ex-office member by statute.



ORGANIZATIONAL STRUCTURE



Administrator **Assistant Administrator** Chief Investment Officer David Shimabukuro

Vacant Vacant

Actuary

The Segal Company

Auditors

Grant Thornton LLP

Dr. Rowlin L. Lichter, Chair Dr. Patricia L. Chinn, Member Dr. William T. J. Cody, Member

Medical Board

Legal Advisor

Attorney General of Hawaii



Certificate of Achievement for Excellence in Financial Reporting

Presented to

Employees' Retirement System of the State of Hawaii

For its Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 1998

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.





PLAN SUMMARY

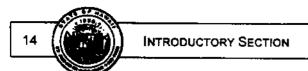
The Employees' Retirement System (ERS) of the State of Hawaii was established by the Legislature in 1925 to provide retirement, disability and survivor benefits for State employees, teachers, professors, county employees, police officers, firefighters, judges and elected officials.

The ERS is a qualified defined benefit pension plan under Section 401(a) of the Internal Revenue Code. As such, the ERS is exempt from federal income taxation on its investment earnings. Since January 1, 1988, member contributions have been tax deferred under Section 414(h) of the Internal Revenue Code.

Members are covered by the provisions of the contributory or noncontributory retirement plan. Those in the contributory plan are required to make contributions to the ERS and may also be covered by Social Security. Employees in the following occupational groups are required to be members of the contributory plan: police officers, firefighters, judges, elected officials, legislative officers, State department heads and deputies, attorney general investigators, narcotics enforcement investigators, and public safety investigators. As of March 31, 1999, 12,145 active employees were enrolled in the contributory plan.

Members of the noncontributory plan do not make contributions to the ERS and must be covered by Social Security. The noncontributory plan covers most employees hired from July 1, 1984, as well as employees hired before that date who elected to join the plan. As of March 31, 1999, there were 46,242 active employees in the noncontributory plan, which represents approximately 79% of all active members. Since most new employees are required to become members of the noncontributory plan, these numbers will continue to increase.

A summary of the general retirement benefits for contributory and noncontributory members is on the following pages. Special provisions applicable only to certain groups of employees are discussed on page 16. The payment options available to members upon their retirement are also included.



SUMMARY OF RETIREMENT BENEFIT PLAN PROVISIONS

	Noncontributory Plan	Contributory Plan
Employee Contributions	No employee contributions	7.8% of salary
Normal Retirement		
Eligibility	Age 62 and 10 years credited service OR Age 55 and 30 years credited service	Age 55 and 5 years credited service
Benefit	1-1/4% of average final compensation times years of credited service (Average final compensation or AFC is an average of the highest salaries during any three years of credited service, excluding any salary paid in lieu of vacation or if ERS membership occurred prior to 1/1/71, AFC may be an average of the highest salaries during any five years of credited service including any salary paid in lieu of vacation.)	2% of average final compensation times years of credited service (Average final compensation or AFC is an average of the highest salaries during any three years of credited service, excluding any salary paid in lieu of vacation or if ERS membership occurred prior to 1/1/71, AFC may be an average of the highest salaries during any five years of credited service including any salary paid in lieu of vacation.)
Early Retirement		
Eligibility	Age 55 and 20 years credited service	Any age and 25 years credited service
Benefit	Normal allowance reduced 6% per year under age 62	Maximum allowance reduced 5% per year under age 55 plus 4% per year under age 50
Deferred Vesting		
Eligibility	10 years credited service	5 years credited service and contributions left in the ERS
Benefit	Accrued normal allowance payable at age 65	Accrued maximum allowance payable at age 55



years of service, and one

beneficiary designated

	Noncontributory Plan	Contributory Plan
Ordinary Disability		
Eligibility	10 years credited service	10 years credited service
Benefit	Accrued normal allowance	1-3/4% AFC for each full year of credited service with a minimum of 30% AFC
Service-Connected Disability		
Eligibility	Any age or credited service	Any age or credited service
Benefit	Accrued normal allowance, but not less than 15% AFC	Totally disabled: lifetime pension of 66-2/3% AFC plus annuity.
		Occupationally disabled: same benefit (66-2/3% pension plus annuity) paid for 3 years and then pension is reduced to 33-1/3% AFC if not totally disabled.
		For accidents after July 7, 1998, member receives return of contributions plus 50% of AFC.
Ordinary Death		
Eligibility	Active employee at time of death with at least 10 years of credited service	Active employee at time of death with at least 1 year of service
Benefit	Surviving spouse and dependent children receive a benefit equal to a percentage of member's accrued normal allowance unreduced for age or if member was eligible for retirement at the time of death, Option B (100% Joint and Survivor) benefit for surviving spouse and a percentage of member's accrued normal allowance unreduced for age for the dependent children	Lump sum payment of member's accumulated contributions plus a percentage of the salary earned in the 12 months preceding death or Option 2 (100% Joint and Survivor) benefit if member was eligible for retirement at the time of death and one beneficiary designated or Option 3 (50% Joint and Survivor) benefit if member was not eligible for retirement at the time of death, credited with 10

Noncontributory Plan

Contributory Plan

Service-Connected Death

Eligibility

Any age or service

Any age or service

Benefit

Surviving spouse and dependent children receive pension equal to a percentage of member's accrued normal allowance, based on minimum accrued normal allowance of

Lump sum payment of member's accumulated contributions, plus pension of 50% AFC to surviving spouse, dependent children or dependent parents

30% AFC

The plan provisions summarized above apply to teachers and most State and County employees. Special provisions applicable to other groups of employees are outlined below:

- A) Police officers, firefighters, investigators of the Department of the Prosecuting Attorney and the Attorney General, narcotic enforcement investigators, and public safety investigators contribute 12.2% of their monthly salary to the ERS instead of 7.8%. These members may retire at age 55 with 10 years of credited service or at any age with 25 years of credited service and receive a retirement benefit of 2-1/2% of average final compensation (AFC) for each year of such service up to a maximum of 80% AFC, provided the last 5 years is credited service in any of these occupations.
- B) Judges, elected officials, and legislative officers may retire at age 55 with at least 5 years of credited service, or at any age with at least 10 years of credited service and receive a pension of 3-1/2% of AFC for each year of such service plus an annuity from their contributions allocable to the period of such service. This benefit cannot exceed 75% of the AFC. Judges hired after June 30, 1999 require 25 years of credited service in order to retire before age 55.
- C) Sewer workers in specified classifications and water safety officers may retire at any age if they are credited with 25 years of such service with the last 5 or more years in these occupations.

Post Retirement Benefit

Each retiree's original retirement allowance is increased by 2-1/2% on each July 1 beginning the calendar year after retirement. This cumulative benefit is not compounded and increases each year by another 2-1/2% of the original retirement allowance without a ceiling (i.e., 2-1/2% of the original retirement allowance the first year, 5% the second year, 7-1/2% the third year, etc.).

Taxation of Benefits

All retirement benefits are subject to Federal income taxes but are exempt from any Hawaii State income taxes. Arrangements to initiate voluntary withholding of Federal income tax can be made at any time. The ERS also provides retirees with a 1099-R tax form on or before January 31 of each year.

Additional Benefits

The retirees, their spouses and dependent children under age 19 can enjoy life insurance, medical, dental, vision, and drug coverage from the Hawaii Public Employees Health Fund (Health Fund) or their union organization. If a member was hired before July 1, 1996, and retires with at least 10 years of credited service, excluding unused sick leave credit, these benefits are provided at no premium cost. If a member was hired or rehired after June 30, 1996, and retires with 10 but less than 25 years of service, these benefits are available on a cost sharing basis. A member with 25 or more years of service receives the retiree Health Fund benefits at no premium cost. Retirees and spouses are also eligible to receive a reimbursement of the Medicare Part B medical insurance premium.

An update of benefits should be obtained from the Health Fund office prior to retirement since changes may have occurred.

Applying for Retirement

A member must file a service retirement application with the ERS no less than 30 days but not more than 90 days prior to the effective date of retirement. Once the application has been filed, cancellation prior to the effective date of retirement is permitted; however, the law requires mandatory retirement upon the third application. Members residing on the neighbor islands may obtain retirement application forms at the following locations:

Hawaii District Office 101 Aupuni Street, Suite 203 Hilo, Hawaii 96720

Kauai District Office 3060 Eiwa Street, Room 302 Lihue, Hawaii 96766

Maui District Office 54 S. High Street, Room 218 Wailuku, Hawaii 96793

Counseling Service

It is the policy of the ERS to render every possible service to its members; however, as thousands of inquiries are received and answered annually, in addition to the actual processing of claims and benefits, present staff and appropriations restrict this service to those members whose immediate welfare is dependent upon the prompt settlement of benefits. Members who are not planning immediate retirement but who are interested in their benefit status, should contact the ERS for the estimate worksheets that will enable them to do their own calculations. Members who are definite about retirement should contact the ERS to request formal retirement estimates.

RETIREMENT OPTIONS

CONTRIBUTORY PLAN

Maximum Allowance: The member receives a lifetime maximum allowance and at death, the difference between the value of the member's contributions at the time of retirement and the retirement allowance paid prior to death is paid to the designated beneficiary(ies) or estate.

Option One: The member receives a reduced lifetime allowance based on age and at death, the difference between the initial insurance reserve and the retirement allowance paid prior to death is paid to the designated beneficiary(ies) or estate.

Option Two (100% Joint and Survivor): The member receives a reduced lifetime allowance based on ages of both the member and the sole beneficiary and at death, the same allowance is paid to the designated beneficiary for life. Should the designated beneficiary predecease the retiree, another beneficiary cannot be named and all payments will cease at the retiree's death.

Option Three (50% Joint and Survivor): This plan is similar to Option Two. The member receives a reduced lifetime allowance which is higher than Option Two and is based on ages of both the member and the sole beneficiary; however, at death one-half of the allowance is paid to the designated beneficiary for life. Like Option Two, should the designated beneficiary predecease the retiree, another beneficiary cannot be named and all payments will cease at the retiree's death.

Option Four: This option allows the member to devise a plan that will provide a benefit according to the member's specifications. It requires certification by the Actuary and approval of the Board of Trustees. The following Option Four plans have been approved:

Combination of Options Five and Maximum Allowance. The member receives a reduced lifetime allowance and is allowed to withdraw the pre-1987 nontaxable contributions, 50% of accumulated contributions, or 75% of accumulated contributions; at death, the difference between the value of the member's contributions at the time of retirement and the retirement allowance paid prior to death is paid to the designated beneficiary(ies) or estate.

Combination of Options Five and One. The member receives a reduced lifetime allowance and is allowed to withdraw the pre-1987 nontaxable contributions, 50% of accumulated contributions, or 75% of accumulated contributions; at death, the difference between the initial insurance reserve and the retirement allowance paid prior to death is paid to the designated beneficiary(ies) or estate.

Combination of Options Five and Two. The member receives a reduced lifetime allowance based on ages of both the member and the sole beneficiary, and is allowed to withdraw the pre-1987 nontaxable contributions, 50% of accumulated contributions, or 75% of accumulated contributions; at death, the

same allowance is paid to the designated beneficiary for life. As in the case of Option Two, should the designated beneficiary predecease the retiree, another beneficiary cannot be named and all payments will cease at the retiree's death.

Combination of Options Five and Three. The member receives a reduced lifetime allowance based on ages of both the member and the sole beneficiary, and is allowed to withdraw the pre-1987 nontaxable contributions, 50% of accumulated contributions, or 75% of accumulated contributions; at death, one-half of the allowance is paid to the designated beneficiary for life. As in the case of Option Three, should the designated beneficiary predecease the retiree, another beneficiary cannot be named and all payments will cease at the retiree's death.

Option Five: The member receives a reduced lifetime allowance and is allowed to withdraw all accumulated contributions; at death, the prorated amount from the last pension payment through the date of death is payable to the beneficiary(ies) or estate.

Option Four and Option Five are restricted to those members with at least ten years of credited service excluding unused sick leave credit.

Regardless of the option selected, should death occur during the first year of retirement, the designated beneficiary may elect to receive benefits as if death had occurred immediately prior to retirement in lieu of the death benefits described above.

NONCONTRIBUTORY PLAN

Normal Allowance: The member receives a lifetime pension and at death, the prorated amount from the last pension payment through the date of death is payable to the beneficiary(ies) or estate.

Option A (50% Joint and Survivor): The member receives a reduced lifetime pension and at death, one-half of the pension is paid to the sole designated beneficiary for life. Should the designated beneficiary predecease the retiree, another beneficiary cannot be named and all payments will cease upon the retiree's death.

Option B (100% Joint and Survivor): The member receives a reduced lifetime pension and at death, the same pension is paid to the sole designated beneficiary for life. Like Option A, should the designated beneficiary predecease the retiree, another beneficiary cannot be named and all payments will cease upon the retiree's death.

Option C (Ten-Year Guarantee): The member receives a reduced lifetime pension. Should death occur within ten years of retirement, the same pension will be paid to the designated beneficiary for the balance of the ten-year period. Should the designated beneficiary predecease the retiree, another beneficiary can be named.

1999 LEGISLATIVE HIGHLIGHTS

Act 65, effective July 1, 1999

 Requires judges who enter or re-enter service after June 30, 1999 to be at least 55 years old and five years of service or have 25 years of service to retire.

Act 100, effective June 30, 1999

• Uses actuarial investment earnings in excess of a ten percent (10%) actuarial investment yield rate to reduce the employer's contribution requirements by \$147.9 million and \$50.6 million for fiscal years ending June 30, 2000 and 2001, respectively.

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF HAWAII



FINANCIAL SECTION

Accountants and Management Consultants

The US Member Firm of Grant Thornton International



Report of Independent Certified Public Accountants

Board of Trustees Employees' Retirement System of the State of Hawaii

We have audited the accompanying combining statements of plan net assets of the Employees' Retirement System of the State of Hawaii (System) as of June 30, 1999 and 1998, and the related statements of changes in plan net assets for the years then ended. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audits in accordance with generally accepted auditing standards and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the System as of June 30, 1999 and 1998, and the changes in plan net assets for the years then ended in conformity with generally accepted accounting principles.

In accordance with Government Auditing Standards, we have also issued our report dated October 29, 1999 on our consideration of the System's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants.

Suite 1000 1132 Bishop Street Honolulu, HI 96813-2830 Tel: 808 536-0066 Fax: 808 523-8590



Board of Trustees Employees' Retirement System of the State of Hawaii

Our audit was conducted for the purpose of forming an opinion on the basic financial statements of the System taken as a whole. The supplementary information for defined benefit pension plans on pages 44 and 45 and the year 2000 supplementary information on page 46 is not a required part of the basic financial statements, but is supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and do not express an opinion on it. In addition, we do not provide assurance that the System is or will become year 2000 compliant, that the System's year 2000 remediation efforts will be successful in whole or in part, or that parties with which the System does business are or will become year 2000 compliant. The supplementary information included on pages 48 through 52 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as whole.

Brunt Thornton LLP

Honolulu, Hawaii October 29, 1999



COMBINING STATEMENTS OF PLAN NET ASSETS – ALL TRUST AND AGENCY FUNDS

June 30,

		1999	
-	Pension Trust	Agency	
-	Employees'	Social	Total
	Retirement	Security	(memorandum
	System	Contribution	only)
ASSETS			<u> </u>
Cash and short-term investments (notes C2 and F)			
Cash	S 16,421,975	\$ 654,964	\$ 17,076,939
Short-term investments	434,304,359	8,885,993	443,190,352
-	450,726,334	9,540,957	460,267,291
Receivables			
Investment sales proceeds and other	422,141,936	_	422,141,936
Accrued investment income	50,217,214	***	50,217,214
Employer appropriations	-	7,968,689	7,968,689
Member contributions	751,065	-,,,,,,,,,	751,065
-	473,110,215	7,968,689	481,078,904
	475,110,215	7,500,005	101,010,20
Investments, at fair value (notes C2 and F)			
Equity securities	4,973,478,783	-	4,973,478,783
Fixed income securities	2,893,929,883	_	2,893,929,883
Index funds	974,990,275	-	974,990,275
Real estate investments	446,239,511	-	446,239,511
Real estate mortgages	122,758,800	-	122,758,800
Real estate owned	58,285,000	-	58,285,000
Alternative investments	43,431,779		43,431,779
	9,513,114,031		9,513,114,031
Other			
Invested securities lending collateral (note F)	601,882,182	_	601,882,182
Equipment at cost, net of depreciation (note K)	172,143	_	172,143
-	602,054,325		602,054,325
Total assets	11,039,004,905	17,509,646	11,056,514,551
LIABILITIES			
Bank overdraft (note F)	3,447,133	_	3,447,133
Accounts and other payables (note I)	15,928,930	_	15,928,930
Payable to Internal Revenue Service	13,720,750	8,615,297	8,615,297
Investment commitments payable	720,939,935	-	720,939,935
Due to employers	17,047,221	8,894,349	25,941,570
Securities lending collateral (note F)	601,882,182	-	601,882,182
•		17.500.646	
Total liabilities	1,359,245,401	17,509,646	1,376,755,047
Commitments and contingencies (notes F, G, H and I)	-		
Net assets held in trust for pension benefits (note D) (a schedule of funding progress is presented on page 44)	\$ 9,679,759,504	s –	\$ 9,679,759 ,50 4
(w someonic or innuming progress is presented on page 44)	J 25072,132,304		4 2 1 2 1 2 1 2 2 1 2 2

The accompanying notes are an integral part of these statements.





COMBINING STATEMENTS OF PLAN NET ASSETS – ALL TRUST AND AGENCY FUNDS (continued)

June 30,

	1998	
Pension Trust	Agency	<u> </u>
Employees'	Social	Total
Retirement	Security	(memorandum
System	Contribution	only)
\$ 19,316,498	\$ 72,506	\$ 19,389,004
359,067,389	6,676,696	365,744,085
378,383,887	6,749,202	385,133,089
370,303,007	0,713,202	000,100,000
97,777,355	_	97,777,355
49,576,214	_	49,576,214
-	963,676	963,676
1,363,705	· -	1,363,705
148,717,274	963,676	149,680,950
4,439,549,112	-	4,439,549,112
2,946,972,5 2 9	_	2,946,972,529
1,009,195,267	_	1,009,195,267
336,860,869	_	336,860,869
157,126,758	-	157,126,758
62,208,000	-	62,208,000
11,731,048		11,731,048
8,963,643,583	-	8,963,643,583
953 035 130		962.076.170
852,975,170	-	852,975,170
953.076.170		952 075 170
852,975,170	-	852,975,170
10,343,719,914	7,712,878	10,351,432,792
3,190,883	525,772	3,716,655
13,691,367	-	13,691,367
400.075.105	4,643,792	4,643,792
408,835,105	2.542.214	408,835,105
13,245,778	2,543,314	15,789,092
852,975,170	 .	852,975,170
1,291,938,303	7,712,878	1,299,651,181
	<u> </u>	
\$ 9,051,781,611	\$ -	\$ 9,051,781,611

The accompanying notes are an integral part of these statements.

Employees' Retirement System of the State of Hawaii STATEMENTS OF CHANGES IN PLAN NET ASSETS

Year ended June 30,

	1999	1998	
Additions Appropriations and contributions (note E) Employers Members	\$ 154,469,844 55,702,647	\$ 310,627,135 56,168,443	
Total contributions	210,172,491	366,795,578	
Investment income From investing activities Net appreciation in fair value of investments Interest on fixed income securities Dividends on equity securities Interest and fees on real estate mortgages Interest on short-term investments Income on real estate investments Rental income Miscellaneous	603,921,849 172,651,897 79,652,696 12,891,806 18,461,545 29,024,659 9,663,298 1,448,046	938,617,411 148,470,804 88,627,353 19,868,762 30,781,815 42,072,473 9,863,946 1,795,608 1,280,098,172	
Less investment expenses	927,715,796 26,006,325	30,670,991	
Net investment income	901,709,471	1,249,427,181	
From securities lending activities Securities lending income	31,796,077	31,726,064	
Securities lending expenses Borrower rebates Management fees Less securities lending activities expense	27,921,660 774,540 28,696,200	28,801,455 512,624 29,314,079	
Net income from securities lending activities	3,099,877	2,411,985	
Total net investment income	904,809,348	1,251,839,166	
Total additions	1,114,981,839	1,618,634,744	
Deductions Benefit payments (note A3) Refunds of member contributions Refunds paid to State and counties Administrative expenses	444,047,239 39,151,493 29,272 3,775,942	426,926,149 24,763,224 3,331,700	
Total deductions	487,003,946	455,021,073	
NET INCREASE	627,977,893	1,163,613,671	
Net assets held in trust for pension benefits (note D) Beginning of year	9,051,781,611	7,888,167,940	
End of year	\$9,679,759,504	\$9,051,781,611	

The accompanying notes are an integral part of these statements.

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Employees' Retirement System of the State of Hawaii

NOTES TO FINANCIAL STATEMENTS

June 30, 1999 and 1998

NOTE A - DESCRIPTION OF THE SYSTEM

1. General

The Employees' Retirement System of the State of Hawaii (System) began operations on January 1, 1926, having been established by the Territorial Legislature in the preceding year. The System is a cost-sharing, multiple-employer public employee retirement system established to administer a pension benefits program for all State and county employees, including teachers, police officers, firefighters, correction officers, judges and elected officials.

Employer, pensioner and employee membership data as of March 31,:

	1999	1998
Employers:	_	_
State	1	1
Counties	4	4
Total employers	5	5
Pensioners, beneficiaries and terminated vested members: Pensioners and beneficiaries currently receiving benefits and terminated vested members entitled to benefits but not yet receiving benefits:		
Police officers, firefighters and corrections officers	2,208	2,104
All other pensioners and beneficiaries	25,742	25,299
Terminated vested members	2,777	2,650
Total parsioners, barafisiaries and		
Total pensioners, beneficiaries and terminated vested members	30,727	30,053
Current employees: Vested:		
Police officers, firefighters and corrections officers	3,649	3,674
All other employees	28,239	26,912
Nonvested:		
Police officers, firefighters and corrections officers	882	893
All other employees	25,617	26,318
Total current employees	58,387	57,797

June 30, 1999 and 1998

NOTE A - DESCRIPTION OF THE SYSTEM (continued)

2. The Financial Reporting Entity

As required by generally accepted accounting principles, these financial statements present the System (the primary government) as a separate reporting entity from the State of Hawaii (State). The System is not part of the State's financial reporting entity because it is a separate legal entity that is fiscally independent of the State. The System was established by Chapter 88 of the Hawaii Revised Statutes and is governed by a Board of Trustees (Board) as discussed below. As the primary government, the System has included the Social Security Contribution Fund in its financial statements since the Social Security Contribution Fund is not a legally separate entity.

The Board administers the System on behalf of public employees of both the State and county governments. Except for limited administrative functions, the State does not have the power to supervise or control the Board in the exercise of its functions, duties and powers. The Board consists of eight members. The State Director of Finance is a statutory member of the Board. Four members of the Board are elected by members of the System and the other three members of the Board are appointed by the governor. Decisions are made with the concurring vote of five members of the Board. The Board appoints the Administrator and engages actuarial and other services required to transact the business of the System.

3. Benefits

Members of the System belong to either the contributory or noncontributory plan. All assets of the System (in the Pension Trust) may be used to pay benefits to any member of the System. Employees covered by Social Security on June 30, 1984 were given the option of joining the noncontributory plan or remaining in the contributory plan. All new employees hired after June 30, 1984, who are covered by Social Security, are generally required to join the noncontributory plan. Most members of the contributory plan are required to contribute 7.8% of their salary. Both plans provide a monthly retirement allowance based on the member's age, years of credited service, and average final compensation (AFC). The AFC is the average salary earned during the five highest paid years of service, including the payment of salary in lieu of vacation, or three highest paid years of service, excluding the payment of salary in lieu of vacation, if the employee became a member prior to January 1, 1971. The AFC for members hired on or after this



June 30, 1999 and 1998

NOTE A - DESCRIPTION OF THE SYSTEM (continued)

3. Benefits (continued)

date is based on the three highest paid years of service excluding the payment of salary in lieu of vacation. Vesting requirements for the contributory and noncontributory plans are five years and ten years, respectively.

Ordinary disability retirement benefits require a minimum of ten years of service, whereas service connected disability resulting from a job related accident does not have a service period requirement. There is no age requirement for disabilities under both plans.

Ordinary death benefits under the contributory and noncontributory plans require at least one year and ten years of service, respectively. There is no service requirement for service connected death benefits under both plans.

Retirement benefits for certain groups of contributory members, such as police officers, firefighters, some investigators, sewer workers, judges and elected officials, vary from general employees. All contributions, benefits and eligibility requirements are governed by Chapter 88 of the Hawaii Revised Statutes.

Every retiree's original retirement allowance is increased by 2-1/2% on each July 1 following the calendar year of retirement. This cumulative benefit is not compounded and increases each year by 2-1/2% of the original retirement allowance without a ceiling (2-1/2% of the original retirement allowance the first year, 5% the second year, 7-1/2% the third year, etc.).

NOTE B - SOCIAL SECURITY CONTRIBUTION FUND

The Social Security Contribution Fund (Contribution Fund) was established under Section 88-224 of the Hawaii Revised Statutes for the following purposes:

- 1. To receive all federal social security contributions withheld from State and county employees, employers' matching contributions, and interest and penalties on unpaid amounts;
- 2. To receive any appropriations to the Contribution Fund;

June 30, 1999 and 1998

NOTE B - SOCIAL SECURITY CONTRIBUTION FUND (continued)

- 3. To pay amounts required to be paid to the Internal Revenue Service (IRS); and
- 4. To invest and collect income on resources held by the Contribution Fund.

Effective January 1, 1987, all governmental agencies, with the exception of the State (employer's contribution only), remit social security contributions directly to the IRS. Social security contributions withheld from employees are remitted directly to the IRS by the employers.

NOTE C - SUMMARY OF ACCOUNTING POLICIES

A summary of the significant accounting policies consistently applied in the preparation of the accompanying financial statements follows.

1. Basis of Accounting

The financial statements are prepared using the accrual basis of accounting. Employer and member contributions are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

2. <u>Investments</u>

Pursuant to Section 88-119 of the Hawaii Revised Statutes, the System may invest in real estate loans and mortgages; government, corporate and certain other obligations; preferred and common stocks; real property; and other securities and futures contracts.

Investments are reported at fair value. Where appropriate, the fair value includes disposition costs. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Mortgages are valued on the basis of future principal and interest payments, and are discounted at prevailing interest rates for similar instruments. The fair value of real estate investments and real estate owned are based on independent appraisals and estimated values.

June 30, 1999 and 1998

NOTE C – SUMMARY OF ACCOUNTING POLICIES (continued)

3. Interest and Earnings Allocation

Pursuant to Section 88-21 and 88-107 of the Hawaii Revised Statutes, the Board shall annually allocate interest and other earnings of the System to the funds of the System, as follows:

- a. Annuity Savings Fund Fixed at 4-1/2% regular interest rate.
- b. Expense Fund To be credited all money to pay the administrative expenses of the System.
- c. Pension Accumulation Fund To be credited with any remaining investment earnings. The amounts contributed to the Pension Accumulation Fund by the State and counties shall be reduced by any investment earnings in excess of the investment yield rate applied in the actuarial valuations, as described below.

For the year ended June 30, 1998, actuarial investment earnings in excess of a 10% actuarial investment yield rate was applied to the annual required employer contribution. Beginning in fiscal year 1999, 100% of the investment earnings shall be deposited in the Pension Accumulated Fund.

4. Risk Management

The System reports liabilities, as discussed in note G, related to certain types of losses (including torts, theft of, damage to, or destruction of assets, errors or omissions, natural disasters and injuries to employees) when it is probable that the losses have occurred and the amount of those losses can be reasonably estimated.

5. Use of Estimates

In preparing financial statements in conformity with generally accepted accounting principles, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.



June 30, 1999 and 1998

NOTE D - DESCRIPTION OF FUNDS (continued)

4. Minimum Pension Fund

Prior to July 7, 1998, the Minimum Pension Fund received appropriations made by the State and counties for the purpose of paying minimum pensions and to pay each retirant a minimum pension under Section 88-89 of the Hawaii Revised Statutes. Act 151, S.L.H. 1999 eliminated the Minimum Pension Fund and authorized the payment of minimum pensions from the Pension Accumulation Fund as discussed in note D1 above. The fund balance as of June 30, 1998 was refunded to State and counties employers in the fiscal year ended June 30, 1999.

The financial statements previously reported for the fiscal year ended June 30, 1998 did not include an adjustment for the return of unrequired funds from the Expense Fund as a result of savings in administrative expenses for the fiscal year then ended. The effects of this reclassification on fund balances as of June 30, 1998 are as follows:

	Pension Accumulation Fund	Expense Fund
As previously reported Return of unrequired funds due to savings	\$8,164,118,043	\$ 4,176,441
in administrative expenses	4,092,294	(4,092,294)
As reclassified	\$8,168,210,337	\$ 84,147

Net assets held in trust for pension benefits as of June 30, are as follows:

	1999	1998	
Pension Accumulation Fund	\$8,776,158,199	\$8,168,210,337	
Annuity Savings Fund	902,196,221	883,457,999	
Expense Fund	1,405,084	84,147	
Minimum Pension Fund		29,128	
Total net assets held in trust			
for pension benefits	\$9,679,759,504	\$9,051,781,611	

June 30, 1999 and 1998

NOTE C – SUMMARY OF ACCOUNTING POLICIES (continued)

6. Reclassifications

Certain reclassifications have been made to the 1998 financial statements to conform to the 1999 presentation.

NOTE D - DESCRIPTION OF FUNDS

Section 88-109 of the Hawaii Revised Statutes requires the establishment and maintenance of specific funds. The funds and their purposes are described hereunder:

1. Pension Accumulation Fund

To accumulate contributions made by the State and counties, transfers of retired members' contributions plus related interest income from the Annuity Savings Fund and income from investments. All pension benefits, including the pensioners' bonus and the minimum pension benefit (effective July 7, 1998) are paid through this Fund, as discussed in note D4 below.

2. Annuity Savings Fund

To accumulate members' contributions and related interest income. Upon a member's retirement, the accumulated contributions and related interest income are transferred to the Pension Accumulation Fund or refunded to the member upon termination.

3. Expense Fund

To pay all the expenses necessary in connection with the administration and operation of the System. The Board estimates the amount of money necessary to be paid into the expense fund for the ensuing biennium to provide for the expense of operation of the System, and pays that amount into the expense account from the investment earnings of the System, subject to review by the legislature and approval by the governor.

June 30, 1999 and 1998

NOTE E - CONTRIBUTIONS

The System's funding policy provides for periodic employer contributions at actuarially determined rates, expressed as a percentage of annual covered payroll, such that the employer contributions, along with employee contributions and an actuarially determined rate of investment return, are adequate to accumulate sufficient assets to pay benefits when due. The funding method used to calculate the total employer contribution required is the entry age normal actuarial cost method. Under this method, the total employer contribution is comprised of the "normal cost" plus the level annual payments required to amortize the unfunded actuarial accrued liability over the remaining period of 18 years from July 1, 1998. The employer normal cost is the level percentage of payroll contribution required to pay all benefits. Actuarial gains and losses resulting from differences between actual and assumed experience are reflected in the employer unfunded accrued liability.

Most members of the contributory plan are required to contribute 7.8% of their salary. Police officers, firefighters, investigators of the department of prosecuting attorney and the attorney general, narcotics enforcement investigators, and public safety investigators are required to contribute 12.2% of their salary.

Employer and member contributions are governed by Chapter 88 of the Hawaii Revised Statutes. The annual required employer contributions for the years ended June 30, 1999 and 1998 were determined as part of actuarial valuations dated June 30, 1996 and 1995, respectively.

NOTE F - CASH DEPOSITS AND INVESTMENTS

The System's policy is to invest cash in excess of operating requirements in income-producing investments. The carrying amount of the System's total deposits (including those classified as short-term investments) as of June 30, 1999 and 1998, net of a bank overdraft of \$3,447,133 and \$3,716,655, was \$16,129,806 and \$15,672,349 (which includes cash and time deposits of \$2,700,000 and \$-0-), respectively. Total bank balances of these deposits amounted to \$20,418,290 and \$19,933,026, respectively. Of the bank balances, \$676,940 and \$2,624,426, respectively, was covered by the Federal Deposit Insurance Corporation or by collateral held by the System or by its agent in the System's name, and \$19,741,350 and \$17,308,600, respectively, was uninsured and uncollateralized. The uninsured and uncollateralized balances are primarily U.S. dollar equivalents of foreign cash held for the purpose of settling transactions.

June 30, 1999 and 1998

NOTE F - CASH DEPOSITS AND INVESTMENTS (continued)

The System's investments are categorized to give an indication of the level of risk assumed at fiscal year end. The three categories of credit risk are:

- Category 1 includes investments that are insured or registered, or for which the securities are held by the System or its agent in the System's name.
- Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty's trust department or agent in the System's name.
- Category 3 includes uninsured and unregistered investments for which the securities are held by the counterparty or by its trust department or agent, but not in the System's name.

The following table summarizes the risk categories and fair values of investments held by the System as of June 30,:

	1999 (in thousands)		1998 (in thousands)	
	Category 1	Fair value	Category 1	Fair value
Short-term securities:				
Bankers' acceptances	\$ -	\$ -	\$ 167	\$ 167
Repurchase agreements	1,125	1,125	1,725	1,725
U.S. Treasury issues	1,964	1,964	4,584	4,584
Commercial paper			13,000	13,000
	3,089	3,089	19,476	19,476
Equity securities:				
Common stock				
Not on securities loan	4,372,709	4,372,709	3,668,218	3,668,218
On securities loan for noncash collateral	15,452	15,452	17,045	17,045
Depository receipts, preferred stock and other				
Not on securities loan	135,643	135,643	108,772	108,772
On securities loan for noncash collateral	4,687	4,687	730	730_
	4,528,491	4,528,491	3,794,765	3,794,765
Subtotal categorized investments			** ***	60 014 041
carried forward	\$4,531,580	\$ 4,531,580	\$3,814,241	\$3,814,241

June 30, 1999 and 1998

NOTE F - CASH DEPOSITS AND INVESTMENTS (continued)

	1999 (in	thousands)	1998 (in t	housands)
	Category 1	Fair value	Category 1	Fair value
Subtotal categorized investments	04 504 500	A 4 521 500	60 014 041	60 104 041
brought forward	\$4,531,580	\$ 4,531,580	\$3,814,241	\$3,184,241
Fixed income securities:				
Mortgage-backed securities				
Not on securities loan	1,071,075	1,071,075	1,098,927	1,098,927
On securities loan for noncash collateral	27,655	27,655	_	_
U.S. Government bonds	, ,	•		
Not on securities loan	148,386	148,386	188,569	188,569
On securities loan for noncash collateral	63,000	63,000	139,755	139,755
Foreign bonds			•	
Not on securities loan	449,883	449,883	380,555	380,555
On securities loan for noncash collateral	· -	_	1,771	1,771
U.S. corporate bonds				
Not on securities loan	627,908	627,908	623,959	623,959
On securities loan for noncash collateral	15,477	15,477	26,879	26,879
Asset backed securities	202,997	202,997	182,499	182,499
	2,606,381	2,606,381	2,642,914	2,642,914
Total categorized investments	\$7,137,961	7,137,961	\$6,457,155	6,457,155
T				
Investments not subject to categorization:				
Investments held by broker dealers under				
securities loans for cash collateral:				
Equity securities:		220 474		175 100
Common stock		228,474		475,488
Depository receipts, preferred stock		60 71 E		22.000
and other		69,715		32,908
Fixed income securities:		0.404		7 070
Mortgage-backed securities		8,484		7,878
U.S. Government bonds		223,543		266,401
Foreign bonds		31,881		12,913
U.S. corporate bonds		18,704		33,750
Asset backed securities		11,587		-
Pooled funds and other		437,600		346,268
Short-term securities		149,125		138,085
Equity securities		43,487		130,003
Fixed income securities Index funds		974,990		1,009,195
Real estate investments				
		446,240 122,759		336,861
Real estate mortgages Real estate owned		58,285		157,127
Alternative investments		43,432		62,208 11,731
Attenda maconicino	•	43,432		11,/31
Total investments		\$10,006,267		\$9,347,968



June 30, 1999 and 1998

NOTE F - CASH DEPOSITS AND INVESTMENTS (continued)

Reconciliation to investments on combined statement of plan net assets:

	1999 (in thousands)	1998 (in thousands)
Total investments	\$10,006,267	\$9,347,968
Less short-term securities		
Bankers' acceptances	_	(167)
Repurchase agreements	(1,125)	(1,725)
U.S. Treasury issues	(1,964)	(4,584)
Commercial paper	-	(13,000)
Pooled funds and other	(437,600)	(346,268)
Less investments on securities loans that were sold and pending settlement; included in investment sales proceeds receivable		
U.S. Government bonds	(50,138)	(16,883)
Common stock	(2,326)	(1,697)
Investments on combined statements of plan net assets	\$ 9,513,114	\$8,963,644

Short-term securities and part of the pooled funds and other are reported as short-term investments in the accompanying combined statement of plan net assets.

The following manager held investments at fair value in excess of 5% of the System's net asset held in trust for pension benefits as of June 30,:

	1999	1998
Mellon Enhanced Equity Index Fund	\$670,961,902	\$727,184,297

June 30, 1999 and 1998

NOTE F - CASH DEPOSITS AND INVESTMENTS (continued)

1. Derivative Investments

The System enters into various derivative investment contracts to hedge, reduce costs and enhance liquidity. As with any investment, derivative contracts are subject to various types of credit and market risks. Notably, these would include the possible inability of a counterparty to meet the terms of the contract, changes in the market value of the underlying collateral, or changes in the interest rate environment. Certain of the System's investments in derivative securities and contracts and their associated credit and market risks are described as follows:

Forward Currency Exchange Contracts

The System enters into various forward currency exchange contracts to manage exposure to changes in foreign currency exchange rates and to facilitate the settlement of foreign security transactions. A forward contract is an agreement to buy or sell a specific amount of currency at a specific delivery or maturity date for an agreed-upon price. Risks associated with such contracts include movements in the value of the foreign currency relative to the U.S. dollar and the ability of the counterparty to perform in accordance with the terms of the contract. Changes in the market value of open and closed forward contracts are recorded as net appreciation in fair value of investments in the statement of changes in plan net assets. The fair value of forward currency exchange contracts outstanding at June 30, is as follows:

	1999	1998
Forward currency purchases Forward currency sales	\$740,434,567 738,840,851	\$976,231,461 974,880,631
Unrealized gains	\$ 1,593,716	\$ 1,350,830



June 30, 1999 and 1998

NOTE F – CASH DEPOSITS AND INVESTMENTS (continued)

1. Derivative Investments (continued)

Mortgage-Backed Securities

As of June 30, 1999 and 1998, the fair value of mortgage-backed securities issued or backed by the U.S. government or its agencies, or corporate issues rated AAA by at least one of the major rating agencies was \$1,107,213,031 and \$1,106,804,965, respectively. A mortgage-backed security depends on the underlying pool of mortgage loans to provide the cash flow to make principal and interest payments on the security. Therefore, they are sensitive to prepayments by mortgagees, which may result from a For example, if interest rates decline and homeowners decline in interest rates. refinance mortgages, thereby pre-paying the mortgages underlying these securities, the cash flows from interest payments are reduced and the value of these securities declines. Conversely, if homeowners pay on mortgages longer than anticipated, the cash flows are greater and the return on the investment would be higher than anticipated. collateralized mortgage obligation (CMO) is a mortgage-backed security that is comprised of classes of bonds created by prioritizing the cash flows of the underlying mortgage pool. As of June 30, 1999 and 1998, the fair value of CMO securities was \$121.515.622 and \$158.484.599, respectively.

2. Securities Lending

The System participated in a securities lending program administered by its bank custodian. Under this program, which is permissible under Chapter 88 of the Hawaii Revised Statutes, certain equity and fixed income securities of the System were lent to participating broker-dealers and banks (borrowers). In return, the System received cash, securities issued or guaranteed by the U.S. government and/or letters of credit as collateral. The System did not have the ability to pledge or sell collateral securities absent of borrower default. Borrowers were required to deliver collateral for each loan equal to: (a) in the case of loaned securities denominated in U.S. dollars or whose primary trading market was located in the U.S., 102% of the market value of the loaned securities; and (b) in the case of loaned securities not denominated in U.S. dollars or whose primary trading market was not located in the U.S., 105% of the market value of the loaned securities. The collateral was marked to market daily. If the market value of the collateral fell below the minimum collateral



June 30, 1999 and 1998

NOTE F - CASH DEPOSITS AND INVESTMENTS (continued)

2. Securities Lending (continued)

requirements, additional collateral was provided. Securities on loan for cash collateral are presented as unclassified in the preceding schedule of custodial credit risk; securities on loan for securities collateral are classified according to the underlying security. At June 30, 1999 and 1998, the System had no credit risk exposure to borrowers because the market value of collateral held by the System exceeded the market value of securities loaned. As of June 30, 1999 and 1998, the market value of securities loaned amounted to approximately \$718,659,560 and \$1,015,518,000, respectively, and the associated collateral amounted to approximately \$744,041,341 and \$1,044,508,000, respectively. In addition, the bank custodians indemnified the System by agreeing to purchase replacement securities or return cash collateral in the event the borrower failed to return the loaned security or pay distributions.

The System did not impose any restrictions on the amount of loans the bank custodian made on behalf of the System. Also, the System and the borrowers maintained the right to terminate securities lending transactions on demand. As such, the maturities of the investments made with cash collateral generally did not match the maturities of the securities loans. The extent of such mismatch as of June 30, 1999 and 1998 was 40 and 38 days, respectively.

3. Foreign Investments

The fair value of the System's investments in foreign equity and fixed income securities as of June 30, is as follows:

	1999	1998
Foreign equity securities Foreign fixed income	\$1,296,951,069	\$ 980,909,299
securities	484,475,506	395,238,709
	\$1,781,426,575	\$1,376,148,008



June 30, 1999 and 1998

NOTE G - RISK MANAGEMENT

The System is exposed to various risks of loss related to torts; theft of, damage to, or destruction of assets; errors or omissions; natural disasters; and injuries to employees.

1. Torts

The System is involved in various litigation and claims, including claims regarding retirement benefits, the outcome of which cannot be presently determined, and as discussed in note I. In the opinion of management, the outcome of these actions will not have a material adverse effect on the System's financial position.

2. Property and Liability Insurance

The System has purchased property and liability insurance for all real estate owned from outside carriers. During the past three fiscal years, no loss settlements exceeded insurance coverages.

3. Workers' Compensation Policy

The State has a self-insured workers' compensation policy. Workers' compensation claims are paid from legislative appropriations.

NOTE H - COMMITMENTS

In the normal course of business, the System enters into commitments with associated risks. The System adheres to the same credit policies, financial and administrative controls and risk limiting and monitoring procedures for these commitments as for all investments.

The System has future financial commitments of up to an additional \$238,632,004 in real estate and alternative investments as of June 30, 1999.

NOTE I – CONTINGENCIES

The State of Hawaii Supreme Court ruled against the System in a class action suit filed by the retired public school principals, vice principals and teachers whose retirement benefits were calculated using the "High 3" method of computing average final compensation. Under the

June 30, 1999 and 1998

NOTE I - CONTINGENCIES (continued)

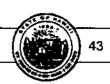
terms of the court order, the System is required to recalculate monthly retirement benefits for all members of the class who are (a) school principals and vice principals collecting a retirement benefit in 1984, (b) teachers collecting a retirement benefit in 1988, and (c) members of these groups who have since retired. Not all members of the class will receive increased pension benefits. As of June 30, 1998, the System estimated and recognized the retroactive liability at approximately \$4,900,000 covering approximately 5,000 retirees. During the fiscal year ended June 30, 1999, the System made the initial retroactive benefit payments to 4,110 members of this class. As of June 30, 1999, management re-estimated the total liability for the retroactive benefits to be approximately \$4,438,000 covering the 4,814 class members identified. As of June 30, 1999, the unpaid liability is \$853,000. The System expects to complete payment of the retroactive benefits to pensioners or their beneficiaries by the end of 1999.

NOTE J - DEFERRED COMPENSATION PLAN

The System does not sponsor a deferred compensation program. System employees are eligible to participate in the deferred compensation plan sponsored by the State of Hawaii. The State sponsored plan was created in accordance with Internal Revenue Code Section 457. The plan, available to all System employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to the employees until termination, retirement, death, or an unforeseeable emergency. All compensation deferred under the plan is held by a custodian for the exclusive benefit of participants and beneficiaries.

NOTE K - FIXED ASSETS

Fixed assets used in the operations are reported in statement of plan net assets at historical cost, net of accumulated depreciation. These assets are depreciated on a straight-line basis over an average useful life of three years, with no salvage value. Accumulated depreciation on equipment as of June 30, 1999 was \$2,014.



REQUIRED SUPPLEMENTARY INFORMATION

REQUIRED SUPPLEMENTARY INFORMATION

June 30, 1999, 1998 and 1997

SCHEDULES OF FUNDING PROGRESS (in thousands)

Actuarial valuation date	Actuarial value of assets (1)	Actuarial accrued liability (AAL) (2)*	Unfunded AAL (3)*= (2)-(1)	Funded Ratio (4)=(1)/(2)	Covered payroll (5)	UAAL as a percentage of covered payroll (6)=(3)/(5)
June 30, 1999	\$8,707,193	\$9,181,731	\$474,538	94.8%	\$2,186,499	21.7%
June 30, 1998	\$8,017,174	\$8,492,012	\$474,838	94.4%	\$2,135,945	22.2%
June 30, 1997	\$7,330,052	\$8,001,855	\$671,803	91.6%	\$2,019,268	33.3%

*Note: Items (2) and (3) include the unfunded liabilities related to the Early Incentive Retirement Program retirees who retired on December 31, 1994 and June 30, 1995 amounting to \$39,110,800, \$62,597,400 and \$84,344,100 as of June 30, 1999, 1998 and 1997, respectively.

In June 1999 and July 1998, the Legislature of the State of Hawaii enacted Acts 100 and 151, respectively, which amends Sections 88-107 and 88-122 of the Hawaii Revised Statutes related to assumptions used in determining the actuarial valuation. The amounts as of June 30, 1998 and 1997 have been revised to be in compliance with these Acts.

SCHEDULES OF EMPLOYER CONTRIBUTION (in thousands)

Year ended June 30,	Annual required contribution	Actual contribution	Percentage contributed
1999	\$185,387	\$154,470	83.3%
1998	\$307,680	\$310,627	101.0%
1997	\$323,188	\$322,121	99.7%

In accordance with the parameters of Governmental Accounting Standards Board Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans, years previous to 1997 are not shown because such information is not available.



NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

June 30, 1999

The information presented in the required supplementary schedules was determined as part of the annual actuarial valuation. Additional information as of the latest actuarial valuation follows.

Valuation date

June 30, 1999*

Actuarial cost method

Entry age normal*

Amortization method

Level dollar

Remaining amortization period

The unfunded actuarial accrued liability related to the Early Incentive Retirement Program is amortized over 2 overlapping 5-year closed periods. The remaining unfunded actuarial accrued liability is amortized over a 17-year closed

period.*

Asset valuation method

An expected actuarial value of assets using the assumed 8.0% rate of return is calculated. This value is adjusted by recognizing one-fourth of the difference between the expected actuarial value of assets and the actual market value of assets.*

Actuarial assumptions:

Investment rate of return

8.0%

Projected salary increases

Based on the actual salary growth experience during the most recent three years for general employees, teachers, and for police, fire and corrections, which ranges from 2.4% to 5.7%.

Assumed inflation rate

4.0%

Post retirement benefit increases

2-1/2% (not compounded)

^{*} The annual required contribution for the year ended June 30, 1999 was determined as part of an actuarial valuation dated June 30, 1996. The actuarial cost method used was the frozen entry age method (formerly known as the frozen initial liability method), the remaining amortization period is a weighted average 40-year closed period and the asset valuation method was to calculate an expected actuarial value of assets using an assumed 8% rate of return adjusted by recognizing one-half of the difference between the expected actuarial value of assets and the actual market value of assets.



YEAR 2000 ISSUE

June 30, 1999

The System has conducted an inventory of computer systems and other electronic equipment that may be affected by the Year 2000 issue and that are necessary to conducting the System's operations. As of June 30, 1999, the System has assessed, remediated and tested and validated all in-house systems identified as being critical to the operations of the System.

In addition to evaluating its own systems and equipment, the System is contacting investment managers, custodians, advisors, other vendors and governmental agencies that it relies on to assess their Year 2000 programs and progress. The System has no information that indicates a significant vendor or service provider may be unable to sell goods or provide services to the System as a result of the Year 2000 issue.

Because of unprecedented nature of the Year 2000 issue, its effects and the success of related remediation efforts will not be fully determined until the Year 2000 and thereafter. Management cannot assure that the System is or will be Year 2000 ready, that the System's remediation efforts will be successful in whole or in part, or that parties with whom the System does business will be Year 2000 ready. However, management believes that its assessment of Year 2000 readiness is valid and that the appropriate measures have been implemented to minimize disruptions to the System's operations resulting from the Year 2000.



CHANGES IN NET ASSETS HELD IN TRUST FOR PENSION BENEFITS

Year ended June 30,

			1999		
-	Pension Accumulation Fund	Annuity Savings Fund	Expense Fund	Minimum Pension Fund	Total (memorandum only)
Additions Appropriations and contributions:					* 161 460 844
	\$ 154,469,700	s -	\$ -	\$ 144	\$ 154,469,844
Employers Members	_	55,702,647	-	-	55,702,647
Net investment income	904,809,348				904,809,348
Total additions	1,059,279,048	55,702,647	-	144	1,114,981,839
Deductions					444,047,239
Benefit payments	444,047,239	-	-	-	39,151,493
Refunds of member contributions	34,696,835	4,454,658	-	29,272	29,272
Refunds paid to State and counties		-	- 555 043	29,272	3,775,942
Administrative expenses			3,775,942		3,7,70,77,12
Total deductions	478,744,074	4,454,658	3,775,942	29,272	487,003,946
Other changes in net assets held in trust for pension benefits:					_
Transfer due to retirement of members	70,434,929	(70,434,929)		-	_
Transfer of interest allocation	(37,925,162)	37,925,162	-	-	_
Transfer to pay administrative expenses	(6,345,904)	-	6,345,904	_	
Return of unrequired funds due to savings in administrative expenses	1,249,025		(1,249,025)		
NET INCREASE (DECREASE)	607,947,862	18,738,222	1,320,937	(29,128)	627,977,893
Net assets held in trust for pension benefits: Beginning of year	8,168,210,337	883,457 <u>.99</u> 9	84,147	29,128	9,051,781,611
End of year	\$8,776,158,199	\$902,196,221	\$1,405,084	<u>\$</u>	\$9,679,759,504



SUPPLEMENTARY INFORMATION



CHANGES IN NET ASSETS HELD IN TRUST FOR PENSION BENEFITS (continued)

Year ended June 30,

Densien		1998	Minimum	Total
Pension Accumulation Fund	Annuity Savings Fund	Expense Fund	Pension Fund	(memorandum only)
\$ 310,627,000	\$ -	s -	\$ 135	\$ 310,627,135
-	56,168,443	-	-	56,168,443
1,251,839,166				1,251,839,166
1,562,466,166	56,168,443	-	135	1,618,634,744
426,910,730	_	_	15,419	426,926,149
20,971,376	3,791,848	_	-	24,763,22
-	-	-	-	<u>-</u>
		3,331,700		3,331,70
447,882,106	3,791,848	3,331,700	15,419	455,021,07
26 220 424	(26, 220, 424)			
36,239,434 (36,575,737)	(36,239,434) 36,575,737	_	-	_
(7,308,626)	-	7,308,626	_	-
4,092,294		(4,092,294)		
1,111,031,425	52,712,898	(115,368)	(15,284)	1,163,613,67
7,057,178,912	830,745,101	199,515	44,412	7,888,167,9
\$8,168,210,337	\$883,457,999	\$ 84,147	\$ 29,128	\$9,051,781,6



SOCIAL SECURITY CONTRIBUTION FUND STATEMENTS OF CHANGES IN ASSETS AND LIABILITIES

June 30,

		16	1999			61	8661	
ASSETS	Beginning balance	Additions	Deductions	Ending balance	Beginning balance	Additions	Deductions	Ending balance
Cash Short-term investments Employer appropriations receivable	\$ 72,506 6,676,696 963,676	\$ 76,215,314 6,230,563 134,502,857	\$ 75,632,856 4,021,266 127,497,844	\$ 654,964 8,885,993 7,968,689	\$5,622,101 2,070,674	\$ 29,382,028 10,127,667 122,775,294	\$ 34,931,623 5,521,645 121,811,618	\$ 72,506 6,676,696 963,676
Total assets	\$7,712,878	\$216,948,734	\$207,151,966	\$17,509,646	\$7,692,775	\$162,284,989	\$162,264,886	\$7,712,878
LIABILITIES								
Bank overdraft	\$ 525,772	\$124,941,533	\$125,467,305	·	\$5,036,760	\$118,566,220	\$123,077,208	\$ 525,772
Payable to Internal Revenue Service Due to employers	4,643,792 2,543,314	128,385,582	124,414,077	8,615,297 8,894,349	2,656,015	123,209,955	118,566,163	4,643,792 2,543,314
Total liabilities	\$7,712,878	\$388,064,783	\$378,268,015	\$17,509,646	\$7,692,775	\$364,873,859	\$364,853,756	\$7,712,878

ADMINISTRATIVE EXPENSES

Year ended June 30,

	1999	1998
Personnel services		
Salaries and wages	\$2,139,241	\$1,991,215
Fringe benefits	558,025	677,857
Net change in unused vacation credits	28,794	(283)
Total personnel services	2,726,060	2,668,789
Professional services		
Actuarial	77,000	75,000
Auditing and tax consulting	115,625	109,271
Medical	114,504	107,647
Disability hearing expenses	4,299	(2,084)
Legal services	140,341	98,398
Total professional services	451,769	388,232
Communication		
Printing and binding	11,779	6,606
Telephone	13,740	14,184
Postage	86,701	82,352
Travel	16,057	13,211
Total communication	128,277	116,353
Rentals		
Rental of equipment	8,821	16,928
Rental of premises	7,141	7,141_
Total rentals	15,962	24,069
Other		
Repairs and maintenance	66,378	42,147
Stationery and office supplies	40,848	36,612
Equipment	27,350	18,030
Automated data processing project	280,548	10,197
Microfilm	11,473	6,086
Armored car service	4,434	4,513
Miscellaneous	22,843	16,672
Total other	453,874	134,257
	\$3,775,942	\$3,331,700

INVESTMENT EXPENSES

Year ended June 30,

	1999	1998
Investment expenses		
Investment manager/advisor fees	\$21,546,951	\$26,525,932
Bank custodian fees	126,279	185,812
Operating expenses – rental	4,302,891	3,922,178
Other investment expenses	30,204	37,069
Total investment expenses	26,006,325	30,670,991
Securities lending expenses		
Borrower rebates	27,921,660	28,801,455
Management fees	774,540	512,624
Total securities lending expenses	28,696,200	29,314,079_
	\$54,702,525	\$59,985,070

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF HAWAII



INVESTMENT SECTION



CALLANASSOCIATES.

CAI

December 27, 1999

SAN FRANCISCO

Board of Trustees

State of Hawaii Employees' Retirement System

NEW YORK

City Financial Tower

CHICAGO

201 Merchant Street, Suite 1400

Honolulu, HI 96813-2980

ATLANTA DENVER

Dear Trustees:

Enclosed is our report on investment activity for the Hawaii Employees' Retirement System for periods June 30, 1999, as requested by the Government Financial Officers' Association (GFOA).

Hawaii ERS-Total Fund Performance

The total assets of the Retirement System exceeded \$9.7 billion at the end of June 30, 1999, an increase of over \$690 million for the fiscal year. The total fund gained 10.28% for the 1999 fiscal year, compared to the benchmark's return of 12.38%. For the cumulative three-year period ending June 30, 1999 the total fund gained 14.98% versus the benchmark's 16.12%, and for the trailing five-year period the total fund posted a return of 14.66% versus the benchmark's 15.81%.

Asset Class Performance

Domestic equity returned 15.98% for the fiscal year, underperforming the S&P 500 Index's 22.76% but beating Callan's Domestic Equity Database median of 14.44%. Domestic fixed-income gained 3.26% for the year, beating the Lehman Brothers Aggregate return of 3.15% and slightly underperforming Callan's Fixed-Income Database median return of 3.48%. International equity performed very well in the 1999 fiscal year, gaining 13.80% versus the MSCI EAFE Index return of 7.62%, whereas international fixed-income underperformed its benchmark, gaining 1.12% versus the Salomon World Government Bond Index gain of 4.13%. Real Estate gained 2.81% for the year ending June 30, 1999 versus the Callan Total Real Estate Funds' gain of 10.84%.

State of Hawaii Employees' Retirement System December 27, 1999 Page 2

Market Conditions

Over the twelve-month period ending June 30, 1999, the U.S. economy continued to be strong. The GDP has been well above 3% for the last three years and inflation remains low despite the fact that unemployment is hovering near an all-time low. International equity markets have been mixed with the MSCI EAFE Index advancing but continuing to be overshadowed by the bull run in U.S. equities. European markets have not contributed to the EAFE Index gains as the Euro continued its slide against the dollar in the first six months of 1999; Asian markets, however, have rebounded strongly from their plunge in the third quarter of 1998 and performing very well.

We expect another active year in 2000. A new target allocation was implemented on July 1, 1999 and through an on-going asset allocation and manager structure review, the Board continues to position the Retirement System for competitive performance in the years ahead.

Callan Associates Inc.

Callan associates Inc.

Report on Investment Activity for State of Hawaii Employees' Retirement System

Prepared by Callan Associates Inc.
December 1999

Outline of Investment Policies

The primary goal of the Plan is the preservation of capital. The Board of Trustees seeks preservation of capital with a consistent, positive return for the Fund. Although pure speculation is to be avoided, the Board appreciates the fact that an above average return is associated with a certain degree of risk. Risk to be assumed must be considered appropriate for the return anticipated and consistent with the total diversification of the Fund.

Expected Annualized Return and Risk

Based on 1997 capital market projections for 5 years, the target allocation¹ is expected to achieve an average annualized return of 8.6% (4.8% real return with expected inflation of 3.8%). The annual nominal return is expected to fall within a range of -0.4% and 17.6% two-thirds of the time.

Long-range Asset Allocation Target

The ERS only invests in the following asset classes:

	Lower Limit	Strategic Allocation ¹	Upper Limit
Domestic Equity	30%	33%*	36%
Small/Mid Cap Equity	3%	5%	7%
International Equity	14%	16%	18%
Domestic Fixed-Income	27%	30%**	31%
International Fixed Income	3%	5%	7%
Mortgages	NA	1%**	NA
Equity Real Estate	8%	10%	12%
Alternative Investments	0	0*	3%

- * The alternatives target is the percentage actually invested up to 3% of the total fund. Changes in the alternatives target are offset by an equal percentage change in the large cap domestic equity target.
- ** The mortgage target is the percentage of the total fund actually invested. Changes in the mortgage target are offset by an equal change in the domestic bond target.

Adjustments in the above targets take place annually in conjunction with the annual asset allocation review. The target is evaluated on the basis of assets designated to each asset class by the Board,

¹ This strategic asset allocation was changed by the Board effective July 1, 1999.



rather than on a current invested position. The target is to be pursued primarily by cash flow on a long-term basis and be revised if significant changes occur within the economic and/or capital market environment according to the rebalancing guidelines. The target is to be reviewed annually for reasonableness relative to significant economic and market changes. A formal asset allocation study should be conducted at least every three years to verify or amend the targets. A formal asset allocation study was completed in the first half of 1999 and the Board approved a new strategic asset allocation target to be implemented as of July 1, 1999.

Portfolio Evaluation Benchmark

To monitor the total fund result, a special target index was constructed to measure the target mix effective April 1, 1997². This serves as a minimum performance objective for the Fund. The target index objective is included in all quarterly evaluation reports of the ERS. The composition of the index is:

- ♦ 33% of the Standard & Poor's 500 Stock Index
- ♦ 5% of the Callan Associates Medium/Small Cap Index
- ♦ 16% of the Morgan Stanley Capital International EAFE Index
- ♦ 31% of the Lehman Brothers Aggregate Bond Index
- ♦ 5% of the Salomon Brothers' Non-U.S. World Government Bond Index
- 10% of the median return of the Callan Associates Real Estate database.

Individual investment managers are not to be measured against this total fund objective. However, it is expected that the sum of their efforts exceeds the objective over time.

Manager Evaluation

Individual domestic and international equity and bond managers are measured against relevant indexes and their respective peer groups of managers. Market indexes and peer group benchmarks are assigned to each Manager and are intended as a guide for the investment manager to understand the risk/reward posture of their portfolio. Real Estate managers are measured against the median performance of the Callan Associates Real Estate database. Managers have full discretion to manage the risk posture of their portfolios relative to their designated market index and may, with conviction and appropriate expertise, execute security strategies not reflected by their market index as long as they conform to the investment guidelines and the laws of the State of Hawaii.

Investment Practices

The full Investment Policy Statement describes in detail acceptable investment practices, manager reporting requirements, manager performance guidelines, the distribution of brokerage commissions, and securities lending guidelines.

² This target was changed by the Board effective July 1, 1999.



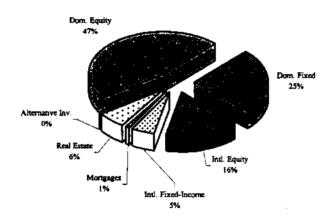
All rates of return are calculated using methodologies that are generally accepted by the Association for Investment Management and Research (AIMR). All domestic equity manager returns are daily, time-weighted rates of return based on custodial data. International equity, domestic fixed-income, and global fixed-income returns are monthly, dollar-weighted. Real estate returns are calculated using statements received directly from the manager. This ensures that the performance is based on accurate cash flows and appraisal values.

Investment Results as of June 30, 1999:

		Year Ended June 30,				Three Years Ended	Five Years Ended
· · · · · · · · · · · · · · · · · · ·	1999	1998	1997	1996	1995	6/30/98	6/30/98
Domestic Equity	15.98%	28.62%	30.27%	26.03%	20.25%	24.79%	24.11%
Standard & Poor's 500	22.76%	30.16%	34.70%	26.00%	26.07%	29.11%	27.87%
CAI Domestic Equity DB	14.44%	25.13%	28.46%	25.39%	22.82%	22.19%	23.42%
Domestic Fixed-Income	3.26%	10.73%	8.45%	5.11%	12.27%	7.44%	7.91%
Lehman Brothers Aggregate	3.15%	10.54%	8.15%	5.02%	12.54%	7.23%	7.82%
CAI Fixed-Income DB	3.48%	9.96%	7.98%	5.27%	11.56%	7.19%	7.73%
International Equity	13.80%	(2.14%)	18.06%	13.40%	1.42%	9.55%	8.62%
MSCI EAFE Index-USD	7.62%	6.10%	12.84%	13.28%	1.66%	8.82%	8.21%
CAI Non-US Equity DB	7.64%	6.48%	15.72%	16.75%	2.18%	11.07%	10.53%
International Fixed-Income	1.12%	2.04%	5.80%	4.38%	18.75%	2.97%	6.24%
Salomon World							
Government Bond	4.13%	4.31%	3.89%	0.36%	18.78%	4.11%	6.11%
CAI Global Fixed-Income	3.66%	6.36%	6.53%	6.75%	14.46%	5.48%	7.31%
Real Estate	2.81%	17.89%	4.92%	8.28%	8.48%	8.34%	8.36%
NCREIF	13.60%	18.18/%	11.74%	9.60%	8.09%	14.40%	12.14%
CAI Total Real Estate	10.84%	15.57%	9.65%	7.95%	8.17%	12.01%	10.62%
Mortgages	9.61%	8.60%	9.15%	9.53%	8.51%	9.12%	9.08%
Lehman Brothers Mortgages	4.02%	8.94%	9.11%	5.87%	12.18%	7.33%	7.98%
Total Fund	10.28%	16.04%	18.78%	15.11%	13.24%	14.98%	14.66%
Composite Benchmark	12.38%	17.11%	19.11%	14.58%	16.13%	16.12%	15.81%

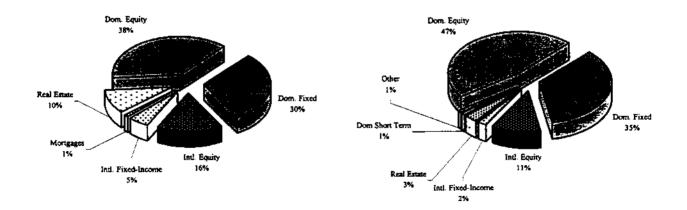
Asset Allocation as of June 30, 1999:

Actual Asset Allocation



Target Asset Allocation

Public Plan Sponsor Database



The Target Benchmark as of June 30, 1999 was 33% S&P 500, 5% Callan Medium and Small Cap Index, 30% Lehman Aggregate, 1% Lehman Mortgages, 10% Callan Real Estate Funds, 16% MSCI EAFE Index and 5% Salomon Brothers World Gov't Bond Index.



INVESTMENT PROFESSIONALS

CUSTODIAL BANK
Bankers Trust Company

INVESTMENT ADVISOR
Callan Associates Inc.

INVESTMENT MANAGERS

U.S. EOUTTIES

Alliance Capital Management Corporation
Barrow, Hanley, Mewhinney & Strauss, Inc.
Bidwell & Riddle Investment Advisory
Delaware Investment Advisors, LLC
Denver Investment Advisors, LLC
Hanson Investment Management Company
Independence Investment Associates, Inc.
Mellon Capital Management Corporation
Oppenheimer Capital Corporation
Pacific Century Trust
TCW Asset Management Co.

REAL ESTATE

Allegis Realty Investors, LLC
Clarion Partners
C.B. Richard Ellis Investors, LLC
Heitman Real Estate Services Group
Invesco Realty Advisors
John Hancock Real Estate
Investment Group
PSI Institutional Realty

INTERNATIONAL EOUITIES

Bank of Ireland Asset Management (U.S.) Ltd.
Capital International, Inc.
Daiwa SB Investments (USA) Ltd.
Nomura Asset Management U.S.A., Inc.
Phillips and Drew
Schroder Investment Management North America, Inc.
Scudder Kemper Investments, Inc.
State Street Global Advisors

U.S. FIXED INCOME

Bradford and Marzec, Inc.
Brinson Partners, Inc.
HCM Capital Management, Inc.
Pacific Income Advisers, Inc.
Pacific Investment Management Company
Scudder Kemper Investments, Inc.

ALTERNATIVE INVESTMENTS

Abbott Capital Management, LLC Hancock Timber Resource Group

INTERNATIONAL FIXED INCOME

Oechsle International Advisors, L.P. Pacific Investment Management Company

List of Largest Assets Directly Held (by fair value)*
as of June 30, 1999 (excludes investments in pooled vehicles)
* A complete list of holdings is available for review upon request.

A complete is vy invasing		•		D	Mandado	Fair Value		
Rank	Par / Shares	Security	<u>Coupon</u>	<u>Due</u>	Moody's	FA	<u>r elas</u>	
Domestic	Fixed Income		< 0000/	7/14/2028	Aaa	S 10	06,631,154	
1	\$ 113,400,000	Federal Home Loan Mortgage Corp. (TBA)	6.000%	8/24/2029	Aaa		87,405,804	
2	90,900,000	Government National Mortgage Assoc. (TBA)	6.500%	7/27/2006	Aaa		61,953,038	
3	62,005,743	Student Loan Marketing Association	Fltg Rate	7/14/2029	Aaa		61,120,150	
4	65,000,000	Federal Home Loan Mortgage Corp (TBA)	6.000%	7/15/2002	Aaa		49,540,257	
5	48,186,400	United States Treasury Note (Inflation Index)	3.625%	2/15/2027	Aaa		35,021,981	
6	33,103,000	United States Treasury Bond	6.625%	11/15/2021	Aaa		30,742,950	
7	25,460,000	United States Treasury Bond	8.000%	8/15/2032	Aaa		29,239,980	
8	29,526,982	FHLMC REMIC Series Tranche E003-A	6.342%	9/25/2028	Aaa		27,785,044	
9	28,700,000	Residential Funding Mtg Secs	6.750%		Aaa		27,699,627	
10	28,806,967	Government National Mortgage Assoc.	6.500%	2/15/2029	Маа		21,055,0=	
Internati	ional Fixed Incom	e	8.000%	6/10/2003	Aaa	s	17,391,315	
1	\$ 10,150,000	United Kingdom Treasury		1/9/2003	Aal	-	12,305,258	
2	18,410,000	Government of Canada	5.250%	6/14/2005	Aaa		12,194,732	
3	18,245,000	Queensland Treasury Corp	6.500%	1/10/2001	Aa3		12,138,910	
4	13,300,000	Republic of Italy	0.000%	7/10/2001			11,848,145	
5	1,350,000,000	DSL Bank	2.600%	2/17/2004			11,607,173	
6	11,550,000	Government of Germany	3.250%	10/20/2005			11,427,504	
7	11,250,000	Republic of Austria	3.900%	12/15/2005			11,352,872	
8	11,420,000	Eurohypo	3.750%	10/28/2003			11,204,754	
9	10,975,000	Electricite de France	3.750%	2/16/2004			10,889,769	
10	6,855,000	Barclays Bank	6.500%	2/10/2004	, ,,,,,,,,		,,	
Domest	ic Equities					S	96,011,370	
1	1,309,618	Bank of America Corp.					82,398,488	
2	1,734,705	Citigroup					71,706,308	
3	1,112,804	Cisco Systems					71,269,598	
4	1,325,946	Waste Mangement Inc.					70,096,615	
5	814,485	MCI Worldcom Inc.					62,354,925	
6	1,551,600						59,216,325	
7	1,127,930	Schering Plough					55,043,430	
8	487,110						54,557,044	
9	818,100						50,105,311	
10	77 7 ,580	Home Depot					·	
Intern	ational Equities					\$	23,195,528	
1	253,330						21,496,800	
2	540,800						16,751,258	
3	1,438						15,680,531	
4	219,500						15,233,417	
5	102,086						13,147,992	
6	162,312						12,374,953	
7	267,000						12,360,479	
8	627,319						12,172,334	
9	112,94						12,076,083	
10	223,05	I ING Groep NV					- *	



Investments Summar (Dollar values expressed in tho	usands) Fa	ir Value as of June 30, 1999	Percentage		alue as of 30, 1998	Perce	entage
Equity Securities	_	4 (14 200	48.5%	s 4	4,297,139		47.9%
Common stock	\$	4,614,309	10.2%	•	1,009,195		11.3%
Index funds		974, 99 0	3.8%		142,410		1.6%
Pooled and others	Sub-Total	359,170 5,948,469	62.5%		5,448,744		60.8%
Fixed Income Securities	••	1,107,214	11.6%		1,106,805		12.3%
Mortgage-backed securiti	ES	384,791	4.0%		577,841		6.5%
U.S. Government bonds		481,764	5.1%		395,239		4.4%
Foreign bonds		662,089	7.0%		684,589		7.6%
U.S. Corporate bonds		214,584	2.2%		182,499		2.0%
Asset backed securities		43,487	0.5%				-
Pooled and others	Sub-Total —	2,893,929	30.4%		2,946,973	-	32.8%
Others							4.5%
Others		504,525	5.3%		399,069		
Real estate equities		122,759	1.3%		157,127		1.8%
Real estate mortgages		43,432	0.5%		11,731		0.1%
Alternative investments	Sub-Total	670,716	7.1%		567,927		6.4%
	Grand Totals	\$ 9,513,114	100.0%	\$	8,963,644		100.0%
Schedule of Investi (Dollar values expressed in		Fair Value as June 30, 19			Total F		Basis Points
Equities				46.5%			
U.S. Equities		\$ 4,519,0		16.0%			
International Equities	Sub-Total	$\frac{1,551,6}{6,070,0}$		62.5%	\$	12,942	
Fixed Income	Sub-10tal						
U.S. Bonds		2,461,		25.4%			
International Bonds		506,		5.2%		4,705	
michanonal Bonds	Sub-Total	2,968,	014	30.6%		4,703	
Other Asset Allocation	ıs	504	525	5.2%			
Real Estate		504,	•	1.3%			
Real Estate Mortgage	s		,759 .433	0.4%			
Alternative Investmen			,432 ,716	6.9%		3,605	
0.1 <u>*</u>							
Other Investment Ser	11000					126	
Custodian Fees Investment Consultan	it Feet					295	
investment Constitut	Grand Totals	\$ 9,708	.828	100.0%	\$	21,673	22

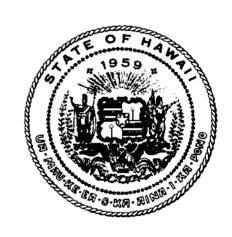
Schedule of Broker Commissions

The Employees' Retirement System participates in a Commission Recapture Program with four brokerage firms; four for domestic trades and one for international. Domestic and international investment managers are required to direct at least 35% and 50%, respectively, of all brokerage transactions to participating brokers. Commissions charged per share are based on the investment manager's normal rate schedule. All commissions recaptured are used exclusively by the ERS for the benefit of its members and beneficiaries. ERS does not guarantee participating brokers any minimums, required volumes or fees. During the fiscal year ended June 30, 1999 the ERS recaptured \$1,306,710 in commissions.

The following is a list of brokers who received \$50,000 or more in commissions during Fiscal Year 1999. A complete list of all commissions is available for review upon request.

			_		Commission			
	Shares Traded	Dol	lar Volume of Trades		Dollar Amount	Per	Share	
Brokerage Firms	12,261,845	s	585,592,824	\$	735,603	\$	0.060	
ROCHDALE SECURITIES CORPORATION	20,344,566	•	460,571,365		735,096		0.036	
MERRILL LYNCH PIECE FENNER & SMITH	13,605,082		494,937,694		693,342		0.051	
MORGAN STANLEY DEAN WITTER	13,517,692		374,347,265		507,320		0.038	
CD A VELERS-SMITH BARNEY	28,196,413		249,996,901		480,429		0.017	
SWISS BANK CORP WARBURG JAMES CAPEL	6,281,210		230,174,442		312,883		0.050	
DONALDSON & CO.	11,749,136		112,133,649		306,522		0.026	
KLEINWORT BENSON	5,262,768		175,597,752		234,942		0.045	
GOLDMAN SACHS & CO.	· ·		175,860,182		214,255		0.052	
LYNCH JONES	4,098,725		136,419,725		201,684		0.040	
CREDIT SUISSE FIRST BOSTON	4,988,616		108,903,003		195,619		0.03	
DEUTCHE BANK (BT ALEX BROWN)	6,366,231		122,992,441		157,255		0.05	
PAINE WEBBER JACKSON & CURTIS	2,655, 52 0		107,452,568		140,876		0.05	
BROADCORT CAPITAL CORP	2,408,600		102,098,515		121,537		0.05	
BEAR STEARNS & CO. INC.	2,055,200		86,721,657		108,140		0.05	
SHEARSON LEHMAN BROTHERS INC.	1,828,383		77,127,270		103,432		0.05	
PRUDENTIAL BACHE SECURITIES	1,767,230		69,270,775		98,171		0.05	
MESIROW	1,685,400		61,628,866		86,472		0.05	
NATIONSBANC MONTGOMERY SEC.	1,674,800				81,279		0.0	
CANTOR FITZGERALD & CO INC	1,381,400		56,682,994		78,351		0.0	
IEFFERIES & COMPANY INC	1,700,812		55,643,686		65,543		0.0	
EXECUTION SERVICES INCORP	1,110,700		48,546,718		65,019		0.0	
ABN AMRO EQUITIES	4,443,559		26,669,470				0.0	
CITATION GROUP (THE)	1,057,700		42,111,891		63,462		0.0	
J P MORGAN SEC EQUITY GROUP	1,128,500		36,349,328		62,948		0.0	
SOCIETE GENERALE	1,897,796		18,626,253		58,541			
CIBC OPPENHEIMER CORP.	1,261,400		45,918,212		55,481		0.0	
LEWCO SECURITIES CORP	972,575		44,538,437		55,099		0.0	
	53,289,517		1,131,633,226		1,326,945	_	0.0	
OTHERS (Includes 180 Brokerage Firms) Total Commissions	208,991,376		5,238,547,109	_	7,346,246		0.0	
		= :		_	(1,306,710)	<u>)</u>		
Less Commissions Recaptured					\$ 6,039,536	_	0.0	
hands being	20.104.768	ì.	\$ 312,254,533	,				

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF HAWAII



ACTUARIAL SECTION



THE SEGAL COMPANY

330 North Brand Boulevard Suite 500 Glendale, California 91203-2308 818-956-6700 FAX: 818-956-6790

December 1, 1999

Board of Trustees Employees' Retirement System of the State of Hawaii City Financial Tower 201 Merchant Street, Suite 1400 Honolulu, Hawaii 96813-2980

Re: Introductory Letter for Actuarial Section

Dear Trustees:

The Employees' Retirement System of the State of Hawaii is funded on an actuarial reserve basis. The Retirement System's basic financial objective is to establish and receive contributions that remain relatively level as a percentage of active member payroll over a long period of years.

Actuarial valuations are prepared annually to determine the Retirement System's actuarial liabilities and the total employer contributions required to fund the System in accordance with the provisions of Chapter 88, Hawaii Revised Statutes. Employers make appropriations to the Pension Accumulation Fund in the amounts determined by annual actuarial valuations.

The most recent actuarial valuation as of June 30, 1999 included a total of 89,114 members of the Retirement System. The actuarial value of the Retirement System's assets amounted to about \$8.7 billion on June 30, 1999. The assumptions used in the 1999 actuarial valuation were adopted by the Board of Trustees based on statutory requirements and on our actuarial experience investigation covering the 1990-95 period.

This Actuarial Section includes: a summary of the 1999 actuarial valuation; our Actuarial Certification Statement; a summary of the actuarial assumptions and methods; and ten-year actuarial schedules containing information on the membership and actuarial condition of the Employees' Retirement System.

Sincerely,

Michael H. Kaplan

Senior Vice President & Actuary

TS/hy



SUMMARY OF 1999 ACTUARIAL VALUATION

Actuarial valuations are prepared annually to determine the employer contributions required to fund the Employees' Retirement System in accordance with the provisions of Chapter 88 of the Hawaii Revised Statutes, as amended. The actuarial valuation as of June 30, 1999 is the basis for determining the employer appropriations to be made to the Pension Accumulation Fund during fiscal year 2001-2002.

Principal Elements

The 1999 actuarial valuation of the Employees' Retirement System is based on four principal elements:

- Current provisions of the contributory and noncontributory benefit plans (as specified in Chapter 88 of the Hawaii Revised Statutes).
- Membership data as of March 31, 1999 (obtained from computer tapes provided by the Retirement System).
- Assets as of June 30, 1999, which had an actuarial value of about \$8.7 billion (based on information obtained from the Retirement System's audited financial statements).
- Actuarial assumptions adopted by the Board of Trustees, and the statutory 8% investment yield rate and variable salary growth assumptions.

Each annual actuarial valuation involves a projection of the benefits expected to be paid in the future to all members of the Employees' Retirement System. The projection of expected future benefit payments is based on the benefit provisions in effect on the actuarial valuation date. A summary of the current benefit and contribution provisions is presented in the Plan Summary Section of this Annual Financial Report.

Membership Data

A total of 89,114 active, inactive and retired members of the Employees' Retirement System are included in the 1999 actuarial valuation. The total membership consists of 58,387 active employees, 2,777 inactive members with vested benefit rights, and 27,950 benefit recipients.



Summary of 1999 Actuarial Valuation.....

Information on active, inactive and retired members is obtained from computer tapes provided by the staff of the Retirement System. Membership data contained on the computer tapes is examined and tested for reasonableness, but is not audited by the actuary.

The schedule below shows the number and average characteristics of all active employees, and employees covered by the contributory and noncontributory benefit plans. As of March 31, 1999, approximately 79% of all active employees were covered by the noncontributory plan. The number and percentage of noncontributory plan members will increase in the future because most new employees are required to be members of the noncontributory plan.

	Contributory Plan	Non-Contributory Plan	All Employees		
Number of employees	12,145	46,242	58,387		
Average age	48.0	44.5	45.2		
Average service	19.8	11.2	13.0		
Average salary	\$44,926	\$35,484	\$37,448		

The following schedule shows the distribution of the active members among the various participating employers.

Employer	Active Members			
State of Hawaii	44,645	77%		
City & County of Honolulu	8,215	14		
City & County of Honolulu -	,			
Board of Water Supply	673	1		
County of Hawaii	1,998	3		
County of Maui	1,878	3		
County of Kauai	978	_2		
	58,387	100%		

The 27,950 benefit recipients included in the 1999 actuarial valuation consist of 26,709 pensioners and 1,241 beneficiaries. For all pensioners receiving benefits on June 30, 1999, the average annual pension was \$16,116. The average pension amount includes pensioners bonuses and post-retirement benefit increases.

Tables showing changes in Retirement System membership during the past ten years from 1990 to 1999 are included in this Actuarial Section.

Actuarial Assumptions

In addition to utilizing current membership and financial data, an actuarial valuation requires the use of a series of assumptions regarding uncertain future events.

Summary of 1999 Actuarial Valuation

The assumptions used in the 1999 actuarial valuation were adopted by the Board of Trustees, based on statutory requirements and on our report on the actuarial experience investigation covering the 1990-95 period.

If the actuarial assumptions prove to be a good indicator of actual emerging experience, the actuarially-determined contribution rates will remain relatively level as a percentage of salary. Contribution rates are redetermined in connection with each annual actuarial valuation to reflect actual experience and any benefit changes enacted since the last valuation.

The actuarial assumptions and methods used in the June 30, 1999 actuarial valuation are summarized in a schedule following our Actuarial Certification Statement.

Actuarial Balance Sheet

Table 1 presents the actuarial balance sheet as of June 30, 1998 and 1999. The total actuarial present value of benefits for all members amounted to about \$10.7 billion on June 30, 1999, comprised of \$4.4 billion for current pensioners and beneficiaries and \$6.3 billion for active employees and inactive members. The Retirement System's accumulated assets (\$8.7 billion), expected future employee contributions (\$0.4 billion), and expected future employer contributions (\$1.6 billion) equaled the total actuarial liability as of June 30, 1999.

Between the 1998 and 1999 actuarial valuations, the unfunded actuarial accrued liability remained at \$0.4 billion. As a percentage of total covered payroll, the unfunded liability increased from 19.3% on June 30, 1998 to 19.9% on June 30, 1999.

The Retirement System's "funded ratio" - assets divided by the actuarial accrued liability - increased from 95.1% on June 30, 1998 to 95.2% as of June 30, 1999.

Employer Appropriations

In accordance with the funding provisions of Chapter 88, Hawaii Revised Statutes, employer contributions are calculated separately for two groups of covered employees: (1) police, fire and corrections officers covered by the contributory plan; and (2) all other employees. The employer contributions derived from the 1999 actuarial valuation are comprised of the normal cost, the level annual payment required to amortize the unfunded actuarial accrued liability over 17 years from July 1, 1999, and the payments required to fund the EIR program.

Table 2 shows the actuarially-determined employer appropriations based on our 1998 and 1999 actuarial valuations (appropriation years 2000-2001 and 2001-2002). Based on the results of the 1999 actuarial valuation, the employer appropriations increased by \$114.1 million.

Table 3 shows the appropriations for each employer for fiscal years 2000-2001 and 2001-2002.

Summary of 1999 Actuarial Valuation

Table 4 presents highlights of the last five annual actuarial valuations of the Employees' Retirement System, which are the basis for determining employer appropriations for fiscal years 1997-98 through 2001-2002.

Early Incentive Retirement (EIR) Program

Act 212/1994, effective July 1, 1994, allowed up to two years of additional service credit for certain members of the Employees' Retirement System as an incentive to retire immediately on a service pension. In addition, no age reduction penalties would be applied to those members opting for retirement under this program. Employees of the Department of Education or the University of Hawaii with at least 25 years of credited service by December 31, 1994 had to retire on June 30, 1995 under the EIR Program. All other employees with at least 25 years of credited service at the time of retirement had to retire no later than December 31, 1994.

There were 2,925 employees who retired under the EIR Program. Of these, 1,485 retired in 1994 and 1,440 retired in 1995. This represents about 39% of the approximately 7,600 employees who were eligible to retire under the EIR Program.

Funding for the cost of the additional benefits paid under the EIR Program is to be handled differently from the standard funding of the Employees' Retirement System. Each employer will be responsible for the additional costs arising from its employees who retired under the program which will be assessed in five equal payments. Table 5 shows the additional costs of the EIR Program.

Our Actuarial Certification Statement, which follows Tables 1 through 5, shows the detailed actuarial cost factors derived from the 1999 actuarial valuation.

Table 1

Actuarial Balance Sheet as of June 30, 1998 and 1999

	<u> 1998</u>	<u>1999</u>
<u>ASSETS</u>		
Total current assets	\$8,017,174,400	\$ 8,707,192,900
Present value of future		
employee contributions	\$ 316,021,700	\$ 359,448,900
Present value of future normal costs	\$ 807,718,800	\$ 1,191,588,000
Unfunded actuarial accrued liability	\$ 412,241,100	\$ 435,426,800
Present value of future Early Incentive Retirement Program		
employer contributions	\$ 62,597,400	\$ 39,110,800
TOTAL ACTUARIAL ASSETS	\$9,615,753,400	<u>\$10,732,767,400</u>
<u>LIABILITIES</u>		
Present value of benefits to current pensioners and beneficiaries	\$4,247,461,000	\$ 4,439,884,600
Present value of future benefits to active members and		
inactive members	\$5,368,292,400	\$ 6,292,882,800
TOTAL ACTUARIAL LIABILITIES	<u>\$9,615,753,400</u>	<u>\$10,732,767,400</u>



Table 2 Calculated Employer Appropriations Requirements as of June 30, 1998 and 1999

	<u>1998</u>	1999	
DOLLAR AMOUNTS			
	ALL EMPLOYEES		
Normal Cost	\$106,521,600	\$141,224,100	
Amortization Payment	40,728,700	44,199,600	
Subtotal	\$147,250,300	\$185,423,700	
EIR Payment	26,383,600	26,383,600	
Excess Investment Earnings Credit	<u>(75,968.900)</u>	-0-	
Total Appropriations	\$ 97,665,000	\$211,807,300	
	POLICE, FIRE AND CORRECTIONS		
Normal Cost	\$ 24,094,800	\$ 38,983,200	
Amortization Payment	(3,405,800)	2,636,700	
Subtotal	\$ 20,689,000	\$ 41,619,900	
EIR Payment	1,949,200	1,949,200	
Excess Investment Earnings Credit	(11,151,000)	0-	
Total Appropriations	\$ 11,487,200	\$ 43,569,100	
	ALL OTHER E	MPLOYEES	
Normal Cost	\$ 82,426,800	\$102,240,900	
Amortization Payment	44,134,500	41,562,900	
Subtotal	\$126,561,300	\$143,803,800	
EIR Payment	24,434,400	24,434,400	
Excess Investment Earnings Credit	<u>(64,817,900)</u>	<u>-0-</u>	
Total Appropriations	\$ 86,177,800	\$168,238,200	



Table 2 (continued)

	1998	1000
~~~ ~~~ · ~~ · ~~ · ~~ · · · · · · · ·	1556	<u>1999</u>
PERCENTAGES OF <u>TOTAL PAYROLL</u>		
	ALL EMPI	LOYEES
Normal Cost	4.99%	6,46%
Amortization Payment	1.90	2.02
Subtotal	6.89%	8.48%
EIR Payment	1.24	1.21
Excess Investment Earnings Credit	<u>-3.56</u>	<u>0.0</u> 0
Total Appropriations	4.57%	9.69%
	POLICE, FIRE AND	CORRECTIONS
Normal Cost	11.47%	18.01%
Amortization Payment	<u>-1.62</u>	1.22
Subtotal	9.85%	19.23%
EIR Payment	0.93	0.90
Excess Investment Earnings Credit	<u>-5.31</u>	0.00
Total Appropriations	5.47%	20.13%
	ALL OTHER E	MPLOYEES
Normal Cost	4.28%	5.19%
Amortization Payment	2.29	2.11
Subtotal	6.57%	7.30%
EIR Payment	1.27	1.24
Excess Investment Earnings Credit	<u>-3.37</u>	0.00
Total Appropriations	4.47%	8.54%

Note: Total annual payroll as of March 31, 1999 was \$2,186,498,844 for all employees, comprised of \$216,476,328 for police-fire-corrections and \$1,970,022,516 for all other employees. (The comparable figures for March 31, 1998 are \$2,135,945,256, \$210,088,212 and \$1,925,857,044, respectively.)



Table.

Employer Appropriations to Pension Accumulation Fund for 2000-2001 and for 2001-2002 by Employer and Employee Groups

	Approl	Appropriations for 2000-2001	3-2001	Appro	Appropriations for 2001-2002	-2002
Employer	Police, Fire & Corrections	All Other Employees	Total	Police, Fire & Corrections	All Other Employees	Total
State of Hawaii	\$ 553,500	\$71,684,900	\$72,238,400	\$ 2,073,500	\$140,570,600	\$142,644,100
City & County of Honolulu	7,404,300	8,962,100	16,366,400	28,504,300	16,534,900	45,039,200
City & County of Honolulu - Board of Water Supply	-0-	1,073,000	1,073,000	<b>0</b> -	2,064,500	2,064,500
County of Hawaii	1,592,200	1,683,500	3,275,700	5,872,600	3,476,500	9,349,100
County of Maui	1,267,300	1,833,800	3,101,100	4,862,500	3,655,800	8,518,300
County of Kauai	006,699	940,500	1,610,400	2,256,200	1,935,900	4,192,100
All Employers	\$11,487,200	\$86,177,800	\$97,665,000	\$43,569,100	\$168,238,200	\$211,807,300



Table 4

### Highlights of Annual Actuarial Valuations 1995 through 1999

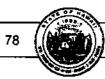
Tam		Valus	Valuation Date: June 30	e 30	
	1995	1996	1997	8661	1999
Number of active members	58,498	586'98	57,044	767,78	58,387
Number of pensioners	24,517	25,975	26,152	26,257	26,709
Average monthly contributory plan pension amount	\$1,126	\$1,204	\$1,257	\$1,312	\$1,367
Average monthly noncontributory plan pension amount	\$1,026	\$1,116	\$1,044	\$1,132	\$1,129
Number of beneficiaries	843	951	1,021	1,146	1,241
Average monthly beneficiary amount	\$19\$	\$653	\$690	\$732	\$771
Total actuarial value of assets (millions)(1)	\$5,615.9	\$6,084.8	\$7,330.1	\$8,017.2	\$8,707.2
Item		Ψb	Appropriation Year		
(Dollar amounts in millions)	1997-98	66-8661	1999-2000	2000-2001	2001-2002
Total calculated appropriations ⁽¹⁾	\$298.0	\$218.8	\$165.2	\$147.3	\$185.4
EIR Program appropriations	12.6	26.4	26.4	26.4	26.4
Excess investment earnings credit(1)	(3)	(200.7)	(163.7)	(76.0)	-
Net employer appropriations	\$310.6	\$154.5	\$ 27.9	\$ 97.7	\$211.8

(1) Figures from 1997 and 1998 valuations have been revised to reflect Act 100/1999 and Board change of June 30, 1997 actuarial asset value.
(2) \$99.4 million in additional employer contributions were deferred pursuant to the pension reform provisions in Act 327/1997.

Table 5

Employer Allocation of EIR Program Costs

			1997/98 - 2001/02	1997/98 - 2001/02 APPROPRIATIONS	NS	
			Police	Police, Fire &		
	General	General & Teachers	Correction	Correction Officers	Total	al
		5-Year		5-Year		S-Year
	Cost	Payment	Cost	Payment	Cost	Payment
State of Hawaii	\$ 29,935,200	\$ 6,942,100	\$ 257,500	\$ 59,700	\$ 30,192,700	\$ 7,001,800
City & County of Honolulu	11,235,600	2,605,600	5,965,300	1,383,400	17,200,900	3,989,000
City & County of Honolulu						
- Board of Water Supply	1,152,100	267,200	0	•	1,152,100	267,200
County: Hawaii	1,184,500	274,700	888,100	206,000	2,072,600	480,700
County: Maui	1,761,500	408,500	585,000	135,700	2,346,500	544,200
County: Kauai	822,600	190,800	000'601	164,400	1,531,600	355,200
Total	\$ 46,091,500	\$10,688,900	\$8,404,900	\$1,949,200	\$ 54,496,400	\$12,638,100
			998/99 - 2002/03 /	998/99 - 2002/03 APPROPRIATIONS	4S	
			Police, Fire &	Fire &		
	General & Teachers	Teachers	Correction Officers	Officers	Total	_
		5-Year		S-Year		5-Year
-	Cost	Payment	Cost	Payment	Cost	Payment
State of Hawaii	\$ 59,272,400	\$13,745,500	0	0	\$ 59,272,400	\$13,745,500
			TOTAL APP	TOTAL APPROPRIATIONS		
			Police, Fire &	Fire &	! !	
	General & Teachers	Teachers	Correction Officers	Officers	Total	
		5-Year		5-Year		5-Year
	Cost	Payment	Cost	Payment	Cost	Payment
State of Flawaii	\$ 89,207,600	\$20,687,600	\$ 257,500	\$ 59,700	\$ 89,465,100	\$20,747,300
City & County of Honolulu	11,235,600	2,605,600	5,965,300	1,383,400	17,200,900	3,989,000
City & County of Honolulu						
- Board of Water Supply	1,152,100	267,200	0	0	1,152,100	267,200
County: Hawaii	1,184,500	274,700	888,100	206,000	2,072,600	480,700
County: Maui	1,761,500	408,500	285,000	135,700	2,346,500	544,200
County: Kauai	822,600	190,800	709,000	164,400	1,531,600	355,200
Total	\$105,363,900	\$24,434,400	\$8,404,900	\$1,949,200	\$113,768,800	\$26,383,600



### December 1, 1999

### EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF HAWAII

### Actuarial Certification Statement

This is to certify that The Segal Company has prepared an actuarial valuation of the Employees' Retirement System of the State of Hawaii as of June 30, 1999.

Actuarial calculations were made with respect to 58,387 participating employees with an annual payroll of \$2,186,498,844; 2,777 inactive members with vested benefit rights; 26,709 pensioners and special annuitants; and 1,241 beneficiaries.

	Police, Fire and Corrections Officers	All Other Employees
C. 11	Corrections Officers	<u> Dinpioyeou</u>
The actuarial cost factors are as follows:		* *** ***
Normal cost	\$ 38,983,200	\$ 102,240,900
Present value of future benefits		
Active employees	\$1,201,918,900	\$4,848,657,300
Inactive members	2,907,700	239,398,900
Pensioners and beneficiaries	633,681,600	3,806,203,000
Total	\$1,838,508,200	\$8,894,259,200
Present value of future employer and employee contributions		
Present value of future normal costs		\$ 863,036,100
Present value of future employee contributions	223,069,300	136,379,600
Present value of future Early Incentive Retirement Program		
Employer contributions	1,949,200	37,161,600
Total	\$ 553,570,400	\$1,036,577,300
Actuarial accrued liability	\$1,284,937,800	\$7,857,681,900
Actuarial value of assets		
Annuity Savings Fund	\$ 353,801,400	\$ 548,394,800
Pension Accumulation Fund		6,899,835,300
Total	\$1,258,962,800	\$7,448,230,100
Unfunded actuarial accrued liability	. \$ 25,975,000	\$ 409,451,800
Appropriations for Fiscal Year ending June 30, 2002		
Normal cost	. \$ 38,983,200	\$ 102,240,900
Amortization payment (over 17 years)	2,636,700	41,562,900
Employer contribution requirement	. \$ 41,619,900	\$ 143,803,800
EIR payment		24,434,400
Total	. \$ 43,569,100	\$ 168,238,200



### EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF HAWAII

### Actuarial Certification (continued)

The actuarial valuation as of June 30, 1999 was based on the provisions of Chapter 88 of the Hawaii Revised Statutes, as amended. The assumptions used in the cost calculations were those adopted by the Board of Trustees based on statutory requirements and on our actuarial experience investigation report covering the 1990-95 period. The actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures.

In our opinion, the contributions required to meet the System's liabilities were calculated in accordance with the provisions of Chapter 88 regarding the funding of the Employees' Retirement System on an actuarial reserve basis.

> Michael H. Kaplan, F.S.A., M.A.A.A. Senior Vice President & Actuary

DB/TS/hy



### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

### Actuarial Assumptions

The actuarial assumptions used in the June 30, 1999 actuarial valuation were adopted by the Board of Trustees after review and discussion of our report on the actuarial experience investigation covering the 1990-95 period.

The basic economic assumptions are a statutory investment yield rate of 8% per year compounded, and assumed salary increases that are based on recent experience. The economic assumptions are based on an assumed long-term inflation rate of 4% per year.

<u>Investment Yield.</u> As specified in Section 88-122(b) of Chapter 88, Hawaii Revised Statutes, the long-term rate of investment yield on the assets of the Retirement System is assumed to be 8% per year.

Beginning with the 1996-97 fiscal year, the actuarial investment income is the sum of the expected net investment income based on the actuarial assumption of 8% and a four-year smoothing of the difference between the market value of assets at year-end and the expected actuarial value of assets. In prior years, the actuarial investment income was the sum of interest, dividends and net realized gains less net realized losses and investment expenses.

<u>Salary Increases</u>. The actuarial cost calculations are based on the statutory assumption that salaries will increase at constant annual rates that are based on a three year average of recent salary increases. For the June 30, 1999 valuation, the expected future salary growth assumptions are 2.4% annually for General Employees, 5.7% annually for Teachers, and 5.0% annually for Police, Fire and Corrections Officers. This is specified in the 1998 amendment to Section 88-122(b) of Chapter 88, Hawaii Revised Statutes.

### Retirement Rates.

The assumed retirement rates for employees eligible to retire under the contributory plan at selected ages are as follows:

Age	General F	Employees	Tead	hers	Police, Fire and Corrections Officers
	Men	Women	Men	Women	Men & Women
45	3.0%	1.0%	0.0%	1.0%	35.0%
50	3.0	1.0	1.0	1.0	20.0
55	15.0	20.0	25.0	30.0	35.0
60	10.0	10.0	15.0	20.0	90.0
65	40.0	50.0	35.0	40.0	100.0
70	100.0	100.0	100.0	100.0	100.0

### Summary of 1999 Actuarial Valuation .....

The assumed retirement rates for employees eligible to retire under the non-contributory plan at selected ages and the average retirement age based on the assumed rates are as follows:

	General I	General Employees		chers
Age	Men	Women	Men	Women
55	7.0%	7.0%	8.0%	10.0%
60	7.0	10.0	5.0	10.0
65	60.0	40.0	20.0	30.0
70	100.0	100.0	100.0	100.0

Withdrawal Rates The withdrawal rates assumed for the central age of each five-year age group are as follows:

### Assumed Withdrawal Rates (%)

Age	General F	Employees	Teac	hers	Police, Fire and Corrections Officers
<b>a</b> -	Men	Women	Men	Women	Men & Women
22	9.21%	8.99%	4.36%	7.62%	2.80%
27	6.00	7.20	4.32	6.53	3.79
32	5.00	6.05	4.25	5.35	3.40
37	3.86	4.17	4.14	3.98	2.08
42	2.92	2.93	3.65	2.63	1.27
47	2.47	2.55	2.45	1.72	1.16
52	2.08	2.12	1.84	1.32	1.33

<u>Disability Rates.</u> The assumed total disability rates are shown below for the central age of each five-year age group:

### Assumed Disability Rates (%)

Age	General Employees	Teachers	Police, Fire and Corrections Officers
•	Men & Women	Men & Women	Men & Women
22	0.02%	0.01%	0.02%
27	0.02	0.01	0.02
32	0.02	0.01	0.02
37	0.02	0.01	0.03
42	0.04	0.02	0.05
47	0.08	0.04	0.10
52	0.18	0.09	0.22

The percentage of disabilities assumed to be ordinary varied by employee group as follows: 75% for general employees, 100% for teachers, and 50% for police-fire-corrections officers.

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### Summary of 1999 Actuarial Valuation .....

Mortality Rates. The mortality tables used in the actuarial valuation are based on: (1) the 1983 Group Annuity Mortality Table (without margin) for general employees and police-fire-corrections officers, and (2) the 1983 Group Annuity Mortality Table (with margin) for teachers. For purposes of actuarial valuations it is assumed that disability pensioners will have the same mortality experience as an individual of the same sex who is ten years older (six year older for Police-Fire-Corrections) than the disability pensioner.

The life expectancies projected by the assumed mortality tables are shown below for each fifth year from ages 40 through 80.

Age	General Employees		mployees Teachers		•	Fire and ns Officers
	Men	Women	Men	Women	Men	Women
40	38.4	43.6	42.3	44.5	37.4	43.6
45	33.7	38.7	37.5	39.9	32.7	38.7
50	29.1	34.0	32.8	34.9	28.2	34.0
55	24.7	29.3	28.3	30.2	23.9	29.3
60	20.6	24.8	24.0	25.7	19.8	24.8
65	16.6	20.5	19.8	21.3	15.9	20.5
70	13.1	16.4	16.0	17.1	12.4	16.4
75	10.1	12.7	12.5	13.4	9.5	12.7
80	7.5	9.6	9.6	10.2	7.1	9.6

<u>Unused Sick Leave</u>. Employees who retire or leave government service with 60 or more days of unused sick leave receive additional service credit as follows: three months credit for the first 60 days plus another month for each additional 20 days. For purposes of actuarial valuations, it is assumed that the average employee will accumulate 11 days of unused sick leave per year.



### Summary of 1999 Actuarial Valuation

### **Asset Valuation Method**

The actuarial value of Plan assets as of June 30, 1999 was determined by first computing the expected actuarial value of assets using the assumed 8.0% rate of return. This preliminary value was then adjusted by recognizing, over a four-year period, the difference between the expected actuarial value of assets and the market value of assets. This development is shown below:

1)	Actuarial Value at Beginning of Year	\$8,017,174,400
2)	Contributions (State, Counties & Members)	210,143,200
3)	Benefit Payments & Refunds	(483,198,700)
4)	Average Value of Assets = Item $(1) + 0.5 \times [Item (2) + Item (3)]$	7,880,646,700
5)	Expected Investment Income @ 8% = .08 x Item (4)	630,451,700
6)	Expected Actuarial Value at End of Year = Item (1) + Item (2)	
	+ Item (3) + Item (5)	8,374,570,600
7a)	Market Value of Assets at End of Year	9,679,759,500
7b)	Outstanding Excess Investment Earnings Credits (Act 100/1999)	239,676,600
7c)	Adjusted Market Value of Assets = Item (7a) - Item (7b)	9,440,082,900
8)	Market Value Excess = Item (7c) - Item (6)	1,065,512,300
9)	Determination of Market Value Excess for Current Year	
	a) Balance from 3 Years Ago	-0-
	b) Balance from 2 Years Ago	-0- (1)
	c) Balance from 1 Year Ago	794,930,600
	d) Amount for Current Year	270,581,700
10)	Amortization of Market Value Excess	
	a) Write-up from 3 Years Ago	-0-
	b) Write-up from 2 Years Ago	<b>-</b> 0-
	c) Write-up from 1 Year Ago	264,976,900
	d) Write-up for Current Year	67,645,400
	e) Total Excess Investment Return	332,622,300
11)	Actuarial Value at End of Year = Item (6) + Item (10e)	8,707,192,900
12)	Annuity Savings Fund	902,196,200
13)	Pension Accumulation Fund = Item (11) - Item (12)	7,804,996,700
14)	Reserve for Future Years = Item (7c) - Item (11)	732,890,000
15)	Total Actuarial Investment Income = Item (5) + Item (10e)	963,074,000
16)	Actuarial Investment Return = Item (15)/Item (4)	12.22%

Balance set to zero as a result of Board's January, 1999 action.

### Summary of 1999 Actuarial Valuation .....

The Reserve for Future Years, item (14), is the excess of the market value over the actuarial value that is not being recognized in the current actuarial valuation. When the market value is greater than the actuarial value, the reserve will be positive; when the market value is less than the actuarial value, the reserve will be negative. Under the method adopted by the Board, the reserve as of any valuation will be gradually recognized during the following three valuations. By spreading the recognition period over a multi-year period, the Board is dampening the volatility inherent in market values of assets and is more able to stabilize the employer appropriations that are, in part, dependent on the relationship between the ERS's liabilities and assets.

### **Funding Method**

The actuarial cost or funding method used to calculate the employer contribution requirement is the Entry Age Normal Actuarial Cost Method. Under this method, the employer contribution is comprised of the "normal cost" plus the level annual payment required to amortize the unfunded actuarial accrued liability over the remaining period of 17 years from July 1, 1999. The employer normal cost is the level percentage of payroll contribution required to pay all benefits. Actuarial gains and losses resulting from differences between actual and assumed experience are reflected in the employer unfunded accrued liability.

### TEN-YEAR ACTUARIAL SCHEDULES

- Retirement System Membership, 1990 to 1999
- Active Member Valuation Data, 1990 to 1999
- Pensioners, Average Annual Pension, and Active Member/Pensioner Comparison, 1990 to 1999
- Assets, Unfunded Accrued Liability, and Funded Ratios, 1990 to 1999
- Solvency Test, 1990 to 1999
- Employer Contribution Rates as Percentage of Payroll, 1990 to 1999
- Employer Appropriations to Pension Accumulation Fund, Appropriation Years 1992-93 to 2001-2002
- Number of Retirants and Beneficiaries, 1990 to 1999

### RETIREMENT SYSTEM MEMBERSHIP, 1990 TO 1999

March 31	Active Employees	Inactive Vested Members	Pensioners & Beneficiaries	Total Membership
1990	51,573	1,936	20,495	74,004
1991	53,595	2,009	21,199	76,803
1992	55,410	1,991	21,787	79,188
1993	57,467	2,051	22,387	81,905
1994	58,890	2,192	22,905	83,987
1995	58,498	2,189	25,360	86,047
1996	56,985	2,290	26,926	86,201
1997	57,044	2,456	27,173	86,673
1998	57,797	2,650	27,403	87,850
1999	58,387	2,777	27,950	89,114

### **ACTIVE MEMBER VALUATION DATA, 1990 TO 1999**

March 31	Number of Active Employees	Average Annual Salary	Percent Change in Average Annual Salary	Total Payroll (millions)	Percent Change in Total Payroll
1990	51,573	\$29,646	7.6%	<b>\$</b> 1,529.0	11.8%
1991	53,595	31,273	5.5	1,676.1	9.6
1992	55,410	33,002	5.5	1,828.7	9.1
1993	57,467	34,386	4.2	1,976.1	8.1
1994	58,890	34,470	0.2	2,029.9	2.7
1995	58,498	35,608	3.3	2,083.0	2.6
1996	56,985	34,923	(1.9)	1,990.1	(4.5)
1997	57,044	35,398	1.4	2,019.3	1.5
1998	57,797	36,956	4.4	2,135.9	5.8
1999	58,387	37,448	1.3	2,186.5	2.4

### PENSIONERS, AVERAGE ANNUAL PENSION, AND ACTIVE MEMBER/PENSIONER COMPARISON, 1990 TO 1999

March 31	Number of Pensioners	Average Annual Pension	Ratio of Active Members Per Pensioner
1990	19,987	\$ 9,912	2.6
1991	20,665	10,500	2.6
1992	21,207	11,200	2.6
1993	21,763	11,841	2.6
1994	22,237	12,468	2.6
1995	24,517	13,452	2.4
1996	25,975	14,364	2.2
1997	26,152	14,976	2.2
1998	26,257	15,552	2.2
1999	26,709	16,116	2.2

Note: Average pension amounts include post retirement allowances and pensioners bonuses.

# ASSETS, UNFUNDED ACCRUED LIABILITY, AND FUNDED RATIOS, 1990 TO 1999

Assets as Percentage of UAL Plus Assets	89.4%	90.5	91.5	92.3	75.9	82.2	92.6	95.1	95.2
UAL as Percentage of Total Payroll	29.8%	24.3	22.1	21.2	85.6	66.1	29.1	19.3	19.9
Unfunded Accrued Liability - UAL (millions)	\$ 455.3 449.6	443.5	436.8	429.7	1,783.9	1,314.8	587.5	412.2	435.4
Valuation Assets (millions)	\$3,846,3	4,241.9	4,680.7	5,146.8	5,615.9	6,084.8	7,330.1	8,017.2	8,707.2
Actuarial Valuation as of June 30	1990	1992	1993	1994	\$661	1996	1997	1998	1999

Beginning 1995, the funding method was changed from Frozen Initial Liability Actuarial Cost Method to Entry Age Normal Actuarial Cost Method. Beginning 1997, the actuarial value of assets was changed from Unfunded accrued liabilities for 1988 - 1994 are not comparable with amounts shown for later years. book value to a market related value. Note:

# SOLVENCY TEST, 1990 to 1999 (AMOUNTS IN MILLIONS)

Actuaria	rial Accrued Liabilities	lities				
Member	Retirees and Beneficiaries and Inactive Vested Members	Active Members Employer Financed	Actuarial Value of Assets	Portion Liabiliti	Portion of Actuarial Accrued Liabilities Covered by Assets	Assets
	(2)	(3)		(1)	(2)	(3)
	\$1,964.5	\$2,392.7	\$3,846.3	100%	%001	43.3%
	2,126.7	2,587.9	4,080.8	100	100	43.3
	2,308.4	2,959.5	4,241.9	100	100	37.5
	2,635.9	3,180.0	4,680.7	100	001	37.3
	2,842.6	3,246.7	5,146.8	100	100	42.9
	3,530.0	3,089.1	5,615.9	100	100	42.3
	4,091.3	2,496.8	6,084.8	001	001	47.3
	4,369.8	2,716.9	7,330.1	100	100	78.4
	4,472.7	3,073.3	8,017.2	100	100	86.6
902.2	4,682.2	3,558.2	8,707.2	100	100	87.8

1988-1994, the sum of the three actuarial accrued liabilities equals the total pension benefit obligation. Beginning 1995, the actuarial accrued liabilities are equal to the actuarial accrued liability under the Entry Age Normal Actuarial Cost Method. Actuarial accrued liabilities for 1988-94 are not comparable with amounts shown for later years. For Note:



# EMPLOYER CONTRIBUTION RATES AS PERCENTAGE OF PAYROLL, 1990 TO 1999

Actuarial	Polic	Police-Fire-Corrections	ections	ΙΙΥ	All Other Employees	oyees	All	All Active Employees	loyees
Valuation as of June 30	Normal Cost Rate	Amorti- Zation Percent	Total Employer Rate	Normal Cost Rate	Amorti- zation Percent	Total Employer Rate	Normal Cost Rate	Amorti- zation Percent	Total Employer Rate
1990	22.93%	2.91%	25.84%	14.50%	2.50%	17.00%	15.46%	2.55%	18.01%
1661	22.86	3.02	25.88	15.09	2.25	17.34	15.87	2.33	18.20
1992	25.34	2.87	28.21	16.18	2.05	18.23	17.06	2.13	19.19
1993	25.55	2.77	28.32	16.59	1.89	18.48	17.42	1.97	19.39
1994	17.71	2.68	20.39	12.88	1.84	14.72	13.33	1.92	15.25
1995	15.95	7.24	23.19	5.38	8.65	14.03	6.39	8.52	14.91
1996	14.23	1.23	15.46	3.76	3.19	6.95	4.76	3.00	7.76
1661	18.40	-6.72	11.68	3.87	-3.68	0.19	5.38	-4.00	1.38
8661	11.47	-6.00	5.47	4.28	0.19	4.47	4.99	-0.42	4.57
1999	18.01	2.12	20.13	5.19	3.35	8.54	6.46	3.23	69.6

Rates for 1988-1994 are not comparable with rates shown for later years. Beginning 1995, Amortization Percent includes EIR payment percentage and Excess Investment Earnings Credit percentage. Also, beginning 1995, the funding method was changed from Frozen Initial Liability Actuarial Cost Method to Entry Age Normal Actuarial Cost Method. Beginning 1997, the actuarial value of assets was changed from book value to a market related value. Note:



### **APPROPRIATION YEARS 1992-1993 TO 2001-2002** TO PENSION ACCUMULATION FUND **EMPLOYER APPROPRIATIONS** (AMOUNTS IN MILLIONS)

	Investment	l Yield Rate		£		
Fiscal	Assumed for Actuarial Valuation	Actuarial Investment Return	Appropria- tion Year	Total Calculated Contribution ⁽¹⁾	Investment Earnings Adjustment	Employer Appropriations
0661-6861	8.0%	9.29%	1992-1993	\$275.4	\$ (57.0)	\$218.4
1661-0661	8.0	8.65	1993-1994	305.0	(24.6)	280,4
1991-1992	8.0	12.17	1994-1995	351.0	(178.9)	172.1
1992-1993	8.0	10.02	1995-1996	383.3	(95.2)	288.1
1993-1994	8.0	7.76	1996-1997	309.4	12.7	322.1
1994-1995	8.0	61.9	1997-1998	310.6	-0-(2)	310.6
9661-566	8.0	66.6	1998-1999	245.2	(90.7)	154.5
2661-966	8.0	$13.72^{(3)}$	1999-2000	191.6	(163.7)	27.9
9661-266	8.0	11.64	2000-2001	173.7	(76.0)	7.76
6661-866	8.0	12.22	2001-2002	211.8	ò	211.8
			_			

Beginning in appropriation year 1997-98, total calculated contribution includes appropriations for the Early Incentive Retirement program.

Beginning with the 1996-97 fiscal year, the actuarial investment income is the sum of the expected not investment income based on the actuarial assumption of 8% and a four-year smoothing of the difference between the market value of assets at year-end and the expected actuarial value of assets. in prior years, the actuarial investment income was the sum of interest, dividends and net realized gains less net realized losses and investment expenses. \$99.4 million in additional employer contributions were deferred pursuant to the pension reform provisions in Act 327/1997. වෙන

### NUMBER OF RETIRANTS AND BENEFICIARIES, 1990-1999

As of March 31	Added to Rolls	Removed from Rolls	Total	Average annual pension
1990	1,238	511	20,714	\$ 9,912
1991	1,170	363	21,521	10,500
1992	1,002	278	22,245	11,200
1993	1,060	317	22,988	11,841
1994	1,037	302	23,723	12,468
1995	2,186	549	25,360	13,452
1996	2,122	556	26,926	14,364
1997	855	608	27,173	14,976
1998	863	633	27,403	15,552
1999	1,188	641	27,950	16,116

### STATE RETIREMENT SYSTEM'S FUNDED RATIOS

Funded Ratio	_	Number of General State Retirement Systems (excluding separate systems for teachers, school employees or municipal employees)
100% or more	10	Arizona (114%), Arkansas (110%), Pennsylvania (110%), North Dakota (108%), Delaware (107%), Kentucky (106%), Alaska (105%), New Jersey (105%), Minnesota (103%), Texas (103%)
90% to 99%	17	North Carolina (99%), Tennessee (99%), Wyoming (99%), California (97%), Idaho (96%), South Dakota (95%), Ohio (94%), Wisconsin (94%), Alabama (93%), Iowa (93%), Michigan (92%), Oregon (92%), Colorado (91%), Florida (91%), Oklahoma (91%), South Carolina (91%), Utah (91%)
80% to 89%	10	Maryland (88%), Montana (88%), Hawaii (85%)*, Georgia (84%), Vermont (84%), Kansas (83%), West Virginia (83%), New Mexico (82%), Illinois (80%), Mississippi (80%)
70% to 79%	6	Missouri (79%), Virginia (79%), Massachusetts (78%), Rhode Island (77%), Nevada (75%), Washington (70%)
60% to 69%	2	Louisiana (65%), Maine (63%)
Less than 60%	1	Connecticut (58%)

Source: National Education Association Research Division, Characteristics of 100 Large Public Pension Plans (September, 1998), Table 7, pp. 53-55, as summarized by The Segal Company.

Note: GASB 25 funded rations are shown for 46 general state retirement systems for valuation year(s) prior to February 1998. A funded ration is not shown for the Nebraska System because it is a defined contribution plan. A funded ratio was not reported for the Indiana System. Funded ratios for the New Hampshire and New York Systems do not exist because of their use of the Aggregate Cost Method.

^{*}Hawaii's GASB 25 funded ratio for fiscal year ended June 30, 1999 was 95%.

### EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF HAWAII



STATISTICAL SECTION

### PARTICIPATING EMPLOYERS AND ACTIVE MEMBERS As of March 31,

	1999	)	199	98
	Active Members	Percentage	Active Members	Percentage
State of Hawaii	44,645	77%	43,900	76%
City & County of Honolulu	8,215	14	8,385	15
- Board of Water Supply	673	1	670	1
Hawaii County	1,998	3	1,982	3
Maui County	1,878	3	1,881	3
Kauai County	978	2	979	2
-	58,387	100%	57,797	100%

### REVENUES BY SOURCE

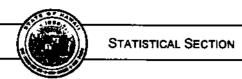
Year ended June 30,	apı	Employer propriations (1)	Employer appropriations as a percentage of covered payroll (2)	Member contributions	Net investment income (3)	Total
1990	S	12,917,084	.84%	\$ 62,329,404	\$ 344,036,354	\$ 419,282,842
<b>199</b> 1		119,176,380	7.11	64,784,980	328,520,376	512,481,736
1992		120,426,998	6.59	65,946,450	522,246,156	708,619,604
1 <b>99</b> 3		246,604,754	12.48	66,378,221	473,157,572	786,140,547
1994		298,723,670	14.72	63,288,694	402,487,400	764,499, <b>76</b> 4
1995		192,536,598	9.24	65,720,847	340,909,684	599,167,129
1996		288,070,687	14.48	53,766,483	1,176,991,469	• 1,518,828,639
1997		322,141,010	15.95	54,364,380	1,293,952,952	1,670,458,342
1998		310,627,135	14.54	56,168,443	1,251,839,166	1,618,634,744
1999		154,469,844	7.06	55,702,647	904,809,348	1,114,981,839

⁽¹⁾ Employer appropriations were made in accordance with actuarially determined contribution requirements. Prior to Fiscal Year 1996, employer appropriations included funding for administrative expenses.

⁽²⁾ Annual covered payroll as of March 31, except for 1990 which was as of June 30, as actuarially reported.

⁽³⁾ Prior to Fiscal Year 1997, assets were reported at cost, thus net investment income includes only realized gains and losses plus dividends, interests, and other earnings. Effective July 1, 1996, ERS adopted GASB Statement 25 changing from reporting investments at cost to reporting investments at fair value (includes unrealized gains and and losses).

^{*} Includes recognition of previously deferred income and net unrealized gains and losses totaling \$594,325,421 as a result of adoption of GASB Statement 25.



### **EXPENSES BY TYPE**

Year ended June 30,	Benefit Payments	Refunds to Members	Administrative Expenses	Other	Total
1990	\$ 204,564,987	\$ 40,003,339	\$ 2,067,028	\$ -	\$246,635,354
1991	230,395,965	44,453,406	2,297,960		277,147,331
1992	249,339,809	34,954,081	2,446,107	_	286,739,997
1993	269,789,684	39,454,960	2,274,981	_	311,519,625
1994	291,607,978	39,784,949	2,875,676	-	334,268,603
1995	324,791,714	83,413,799	2,896,684	-	411,102,197
1996	386,734,078	70,978,627	2,960,240	-	460,672,945
1997	410,522,020	26,174,454	3,217,348	-	439,913,822
1998	422,026,149	24,763,224	3,331,700	_	450,121,073
1999	444,047,239	39,151,493	3,775,942	29,272	487,003,946

### BENEFIT PAYMENTS BY TYPE

	Ber	nefits		Refunds of Members	
Service	Disability	Death	Sub-total	Contributions	Total
\$ 194,920,750	\$ 5,025,756	\$ 4,618,481	\$ 204,564,987	\$ 40,003,339	\$ 244,568,326
220,032,253	5,027,971	5,335,741	230,395,965	44,453,406	274,849,371
239,464,491	5,553,148	4,322,170	249,339,809	34,954,081	284,293,890
258,536,407	5,948,855	5,304,422	269,789,684	39,454,960	309,244,644
281,295,215	6,311,982	4,000,781	291,607,978	39,784,949	331,392,927
315,636,011	6,311,914	2,843,789	324,791,714	83,413,799	408,205,513
376,976,563	6,399,486	3,358,029	386,734,078	70,978,627	457,712,705
398,471,144	7,424,424	4,626,452	410,522,020	26,174,454	436,696,474
410,622,492	7,633,183	3,770,474	422,026,149	24,763,224	446,789,373
431,410,418	8,055,791	4,581,030	444,047,239	39,151,493	483,198,732
	\$ 194,920,750 220,032,253 239,464,491 258,536,407 281,295,215 315,636,011 376,976,563 398,471,144 410,622,492	Service         Disability           \$ 194,920,750         \$ 5,025,756           220,032,253         5,027,971           239,464,491         5,553,148           258,536,407         5,948,855           281,295,215         6,311,982           315,636,011         6,311,914           376,976,563         6,399,486           398,471,144         7,424,424           410,622,492         7,633,183	\$ 194,920,750 \$ 5,025,756 \$ 4,618,481 220,032,253 5,027,971 5,335,741 239,464,491 5,553,148 4,322,170 258,536,407 5,948,855 5,304,422 281,295,215 6,311,982 4,000,781 315,636,011 6,311,914 2,843,789 376,976,563 6,399,486 3,358,029 398,471,144 7,424,424 4,626,452 410,622,492 7,633,183 3,770,474	Service         Disability         Death         Sub-total           \$ 194,920,750         \$ 5,025,756         \$ 4,618,481         \$ 204,564,987           220,032,253         5,027,971         5,335,741         230,395,965           239,464,491         5,553,148         4,322,170         249,339,809           258,536,407         5,948,855         5,304,422         269,789,684           281,295,215         6,311,982         4,000,781         291,607,978           315,636,011         6,311,914         2,843,789         324,791,714           376,976,563         6,399,486         3,358,029         386,734,078           398,471,144         7,424,424         4,626,452         410,522,020           410,622,492         7,633,183         3,770,474         422,026,149	Benefits         Members           Service         Disability         Death         Sub-total         Contributions           \$ 194,920,750         \$ 5,025,756         \$ 4,618,481         \$ 204,564,987         \$ 40,003,339           220,032,253         5,027,971         5,335,741         230,395,965         44,453,406           239,464,491         5,553,148         4,322,170         249,339,809         34,954,081           258,536,407         5,948,855         5,304,422         269,789,684         39,454,960           281,295,215         6,311,982         4,000,781         291,607,978         39,784,949           315,636,011         6,311,914         2,843,789         324,791,714         83,413,799           376,976,563         6,399,486         3,358,029         386,734,078         70,978,627           398,471,144         7,424,424         4,626,452         410,522,020         26,174,454           410,622,492         7,633,183         3,770,474         422,026,149         24,763,224



# AVERAGE MONTHLY SERVICE PENSIONS BY YEARS OF CREDITED SERVICE

				Years of Cre	Years of Credited Service			
As of March 31	6-0	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	All
1993 Average Monthly Benefit Number of Active Retirants	\$180	\$348	\$567 2,450	<b>\$8</b> 22 2,796	\$1,232	\$1,519 4,415	<b>\$</b> 1,571 2,430	\$1,004
1994 Average Monthly Benefit Number of Active Retirants	\$185	\$364 2,626	\$587 2,507	\$854 2,834	\$1,287 4,591	\$1,597	\$1,649 2,467	\$1,057
1995 Average Monthly Benefit Number of Active Retirants	\$191 1,603	\$377 2,782	\$609 2,664	\$882 2,991	\$1,388 5,454	\$1,681 5,253	\$1,772 2,706	\$1,143 23,453
1996 Average Monthly Benefit Number of Active Retirants	\$196 1,554	\$387 2,865	\$629 2,724	\$911 3,090	\$1,467 6,068	\$1,170	\$1,882	\$1,220 24,926
1997 Average Monthly Benefit Number of Active Retirants	\$201 1,515	\$400	\$659 2,781	\$943 3,152	\$1,539 6,146	\$1,852	\$1,985	\$1,276 25,077
1998 Average Monthly Benefit Number of Active Retirants	\$207 1,457	\$411 2,932	\$685	\$978 3,190	\$1,590	\$1,918	\$2,060	\$1,321 25,173
1999 Average Monthly Benefit Number of Active Retirants	\$212 1,409	\$421 3,012	\$710 2,882	\$1,010 3,266	\$1,645 6,306	\$1,986 5,879	\$2,143 2,854	\$1,369 25,608

# BENEFIT PAYMENTS BY RETIREMENT TYPE AND OPTION RETIRED CONTRIBUTORY MEMBERS

As of March 31, 1999

	Number		i i	:	4				1		:		
Monthly	of	•	Type of 1	Type of Retirement *	nt *				Ketır	Retirement Option	ption		
Benefit	Recipients	-	2	3	4	5	Мах	Opt. 1	Opt. 2	Opt. 3	Opt. 4	Opt. 5	Other
\$ 1-300	2,405	2,105	38	24	91	222	593	674	202	89	275	579	14
301 - 600	3,821	3,282	231	105	17	186	436	365	158	63	1,103	1,685	11
601 - 900	3,267	2,888	8	119	17	153	323	797	117	63	1,156	1,338	œ
901 - 1,200	2,933	2,684	34	95	=	109	235	246	68	40	1,109	1,208	9
1,201 - 1,500	2,738	2,624	12	38	<b>∞</b>	55	183	178	83	23	1,151	1,114	9
1,501 - 1,800	2,532	2,450	œ	24	∞	42	137	121	57	20	1,028	1,163	9
1,801 - 2,100	2,271	2,221	∞	01	7	30	110	99	41	21	847	1,190	2
2,101 - 2,400	1,808	1,777	2	5	Э	21	125	57	46	22	782	774	2
2,401 - 2,700	1,208	1,195	ı	2	٠	Ξ	66	43	32	21	639	374	•
2,701 - 3,000	768	754	1	4		6	79	32	27	18	404	208	•
Over 3,000	1,174	1,153		2	2	17	Ξ	57	78	38	607	283	•
Totals	24,925	23,133	423	428	85	855	2,431	2,095	930	397	9,101	9,916	55

* Type of Retirement

Note: Refer to Plan Summary in the Introductory Section for descriptions of the types of retirement and benefit options selected by the members.

1 - Normal retirement for age & service 2 - Ordinary disability retirement

3 - Occupational disability retirement

4 - Survivor payment - death in service

5 - Survivor payment - normal or disability retirement

## BENEFIT PAYMENTS BY RETIREMENT TYPE AND OPTION RETIRED NONCONTRIBUTORY MEMBERS As of March 31, 1999

Totals	Over 3,000	2,701 - 3,000	2,401 - 2,700	2,101 - 2,400	1,801 - 2,100	1.501 - 1.800	1,201 - 1,500	901 - 1,200	601 - 900	301 - 600	<b>\$</b> 1 - 300	Benefit	Monthly
3,025	48	57	74	118	305	316	262	303	390	676	<b>47</b> 6	Recipients	Number of
2,476	47	57	72	116	299	303	242	254	307	476	303	-	
205		,	ı	•	_	4	<b>∞</b>	22	40	94	36	2	Type of
38	,	ı	•		•		ı	1	u	15	20	3	Гуре of Retirement
89	•			_		<b></b>	2	2	9	21	53	4	*
217	_	1	2	-	Ŋ	œ	10	25	31	70	64	S	
1,669	34	37	38	77	218	222	142	165	213	338	185	Normal	
473	9	9	25	16	32	42	50	57	65	93	75	Opt. A	Retire
567	u	6	. 00	17	25	27	47	55	77	169	133	Opt. B Opt. C	Retirement Option
215	2	, <i>U</i>	، د	- 00	30	24	23	25	25	51	19	Opt. C	on
101		•	1	,	•		٠,		. 10	25	2	Other	

### * Type of Retirement

- 1 Normal retirement for age & service
- 2 Ordinary disability retirement
- 4 Survivor payment death in service 3 - Occupational disability retirement
- 5 Survivor payment normal or disability retirement
- descriptions of the types of retirement and benefit options selected Note: Refer to Plan Summary in the Introductory Section for by the members.